

THE MEANING OF STRESS IN MEN WHO HAVE SUSTAINED A
MYOCARDIAL INFARCTION

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ABSTRACT

To illuminate stress as it is experienced in the everyday life of men between the ages of 50-70 who have had a myocardial infarction, a sample of ten men were individually interviewed . A control group consisting of ten men who stated that they were healthy and who resided in a rural community setting was contrasted with the sample group. The conceptual framework for this study was based on Parse's (1985) nursing theory, Man-Living-Health. Denzin's (1989) interpretive interactionism methodology was used for data analysis. Results showed chronic stress followed by a period of no stress, then another period of stress followed shortly by MI in the study group. Although the control group experienced significant stress, they were able to achieve balance in their lives perhaps due to increased emphasis on spiritual values. The Holmes & Rahe scale proved of controversial value. This research promotes human participation in health, individual control of health and has implications for nursing autonomy. When the person is overpowered by environment or health, balance can be restored with the person at the center and in control with environment and health in proper perspective. Key words: stress, lived experience, myocardial infarction, interpretive interactionism, and epiphany.

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CHAPTER ONE

INTRODUCTION

This research was undertaken to illuminate stress as it is experienced in the everyday life of men between the ages of 50 and 70 who have had a myocardial infarction (MI). The relationship between cardiovascular disease and stress is well documented in the literature. Through quantitative research, the signs and symptoms of stress have been identified and categorized into lists. These studies have relied extensively on the use of questionnaires to assess stress. While stress is commonly viewed as a component of cardiovascular disease, what this means in the everyday life experience of the individual has not been identified.

Stress has been variously defined as bodily or mental tension (Webster, 1989), a nonspecific body response to any demand (Selye, 1956), or as all processes arising from external or internal stresses which impose an overwhelming demand on the organism (Engle, 1987). While there is no absolute agreement on the meaning of this term, stress is recognized as playing an important part in both the cause and exacerbation of cardiovascular disease. Although commonly associated with cardiovascular disease, the meaning of stress in the everyday life experience of the individual has not been identified.

Overview of Conceptual Framework

This study was based on the nursing theory Man-Living-Health (Parse, 1985). People are viewed as whole beings with bio-psycho-socio-spiritual components. Person is viewed as a synergistic being in mutual and simultaneous interchange with the environment. Health, in this nursing theory is a process of becoming. This theory is grounded in the human sciences, which emphasize the connectedness of life events and focuses on human participation in experiences. Lived experience is health; the co-creation of health occurs through human connectedness with others and the environment.

Interpretive interactionism (Denzin, 1989), attempts to make the world of lived experience accessible to the reader. Its focus is on those life experiences that radically alter and shape the meanings persons give to themselves and their life projects. Interactional moments that leave marks on people's lives have the potential for creating transformational experiences for the person. They are the epiphanies in which personal character is manifested and made apparent. Epiphanies are often interpreted by the person and by others as turning point experiences. Having had this experience, the person is never again quite the same.

Stress occurs when a person is overpowered by health or environment and an imbalance is created. Denzin's conceptual

framework is congruent and consistent with this study and is a useful lens through which to examine this phenomenon.

Purpose of the Study

The purpose of this study was to examine the meaning of stress as it is experienced in the everyday life of men between the ages of 50-70 who have sustained a myocardial infarction. By making the world of the lived experience accessible and capturing the voices, emotions, and actions of men, understanding of stress as it is experienced in everyday life is illuminated. Men between the ages of 50-70 were chosen for the study because it was thought that any genetic cardiac anomalies would probably be addressed prior to this age, and that MI resulting from old age would not be a factor. Using methodology described by Denzin (1989), this interpretive research focuses on life experiences that radically alter and shape the meanings persons give to themselves and their life projects. Men who have sustained an MI were interviewed to determine the lived experience of stress as it affects them in their everyday life.

Research Question

The following research question was developed for the study: What is the lived experience of stress in men between 50 and 70 who have experienced an MI? In order to answer that question a sample of ten men were interviewed and asked

to share their feelings of what the everyday lived experience was like in the year preceeding their MI.

Definition of Terms

Key terms in this study were stress, lived experience, myocardial infarction (MI), interpretive interactionism, and epiphany. Stress was defined as an imbalance whereby person is overpowered by environment or health. Lived experience was defined as the personal involvement, thoughts, perceptions and feelings of those who have survived a myocardial infarction event. Myocardial infarction was defined as the development of an infarct in the myocardium, usually the result of myocardial ischemia following occlusion of a coronary artery. Interpretive interactionism was defined as the attempt to make the world of lived experience directly accessible to the reader. Epiphany was defined as those interactional moments that leave marks on people's lives and have the potential for creating transformational experiences for the person.

Significance to Nursing

When a stress response is triggered, a person either perceives an environmental demand as a threat to emotional or physical well-being or perceives coping ability as inadequate (Engle, 1987). Disease or mortality may result especially in the absence of physical exertion or in situations of social isolation

(Engle, 1987). Although there have been quantitative studies reported in the scientific literature which attempt to elucidate the effects of stress, qualitative studies that capture and describe the core of these experiences to the individual who has sustained an MI were unavailable. This qualitative study was necessary to determine the lived experience as it relates to the person who has experienced myocardial infarction.

Deeper understanding of the meaning of stress as it is experienced in everyday life will expand nursing knowledge of the person who has experienced a myocardial infarction. Understanding what the everyday lived experience is like in regard to stress will enable the nurse to gain understanding that enhances the body of nursing knowledge. With this knowledge the nurse can empower individuals to participate actively in their own healing processes and can assist in the prevention of disease or mortality.

CHAPTER TWO

REVIEW OF THE LITERATURE

The purpose of this study was to illuminate the meaning of stress as it is experienced in the everyday life of men who have experienced an MI. This chapter presents the conceptual foundation for the study, the interactionist paradigm used to examine the phenomenon of stress, and examines literature related to stress and the stress response.

Conceptual Theoretical Basis

The theoretical framework for this study was based on the nursing theory Man-Living-Health, (Parse, 1981). Parse's assumptions were synthesized from Rogers' (1970) concepts of energy field, openness, pattern and organization, and four-dimensionality. Man-Living-Health is a new paradigm of nursing rooted in the human sciences. "It identifies man as one who co-participates with the environment in creating and becoming, and who is whole, open and free to choose ways of living health (Parse, 1981)". Health is the person's self-emergence and cannot be described as good, bad, more, or less. It is not a state, but a continuously changing process (Parse, 1981).

Man-Living-Health theory evolves from the concept that human beings are a whole, different from and more than their

parts. People are open beings who have an energy interchange with the environment to co-create their constantly changing health. Parse (1987) emphasizes that the whole person determines the quality of life. The nurse and the person mutually derive the meaning of a situation for that person. Through the nurse's structuring skills the person shares in rhythmical pattern, thoughts, and feelings concerning the meaning of the lived experience.

Parses' principles are (1) structuring meaning multidimensionally; (2) co-creating rhythmical patterns; and (3) co-transcending with the possibles. The nine concepts of Man-Living-Health theory flowing from the three principles are (a) imaging, valuing, languaging, (b) revealing-concealing, enabling-limiting, connecting-separating, and (c) powering, originating, and transforming.

The first principle, structuring meaning multidimensionally, refers to creating a personal reality through living the many levels of the universe all at once. Personal reality is created through the concepts of imaging, valuing, and languaging. Imaging is pre-reflective or reflective picturing the world through a frame of reference. Valuing is choosing cherished beliefs from multidimensional experiences. Languaging is expressing cherished beliefs through speaking and moving.

The second principle, co-creating rhymical patterns of relating, (Parse, 1981), refers to co-constituting a personal way of being by living the paradoxes of the everyday life. Patterns of relating distinguish one person from another and are recognized in living the conceptual paradoxes of revealing-concealing, enabling-limiting, and connecting-separating. Both sides of the paradox constitute the lived experience that is health. Enabling-limiting is the simultaneous living of opportunities and limitations in a situation. Every choice has both opportunities and limitations and the outcomes of choosing are not completely known. Connecting-separating is moving with some phenomena and away from other phenomena all at once. Revealing-concealing is the simultaneous telling and not telling about self to self and others. In revealing a particular view, other views are concealed. Not being able to share all that one knows gives rise to the nature of the person as an unfolding mystery.

The third principle, co-transcending with the possibilities (Parse, 1981) refers to continuously reaching toward what is not-yet. This idea posits change as the fundamental nature of humanity. People are always changing as lived experiences reflect the chosen priorities of the moment. This everchanging process is called becoming. Reaching toward the not-yet

happens through the concepts of powering, originating, and transforming.

Powering is the propelling force of pushing-resisting in interhuman encounters. It is the process of intentionally moving toward different possibilities. Originating is creating anew through living the paradoxes of conformity-nonconformity and certainty-uncertainty. People strive to be unique and like others at the same time. Transforming is the changing of change, or viewing the familiar in a different way. Discovering a different view reveals new possibles that enhance the changing of change. Powering, originating, and transforming are processes in contrascending with the possibilities.

Nursing is a scientific discipline concerned with understanding people and health. The major focus of the practice of nursing is the caring and healing of unitary human beings through illuminating meaning, synchronizing rhythms, and mobilizing transcendence (Parse, 1987). People create a personal reality to make explicit human participation. People co-create lived experiences. Health is human lived experience, thus people co-create health.

Nursing focuses on health from a human science view rather than a medical model of illness. The process of illuminating, synchronizing, and mobilizing describes the

practice dimensions of nursing as unique in providing health care. Parse's theory adds support to nursing as a scientific discipline, and the basis of an autonomous profession.

Parse views person as the key to all aspects of the theoretical assumptions. Person is characterized as a living unit that is more than and different from the sum of the parts. The whole of a human is characterized by the person's own unique patterns. Health is viewed as a continuously changing process of becoming that people experience in the energy interchange with the environment. Each person provides their own description of health. Health is the "who" that one is (Parse, 1981).

Parse differs from other existential phenomenologists in stating that choosing begins before birth, at the moment of conception, and before. Choices are made at multidimensional levels of the person's universe. Death does not mean the end. Parse believes death is a transformation and that the individual gives meaning to dying based on values.

Nursing acts center on the person's participation in lived experience. There is an open relationship whereby the nurse participates with the person who is uncovering the meaning of a situation. This open relationship is an example of the interrelatedness between humanity and self, humanity and others, and humanity and the environment. Thus, the meaning

of health to each individual is illuminated in the nurse person interrelationship. The meaning of a situation becomes more clear. Nurses are able to discern when person is out of balance with environment and health, and assist in restoring balance.

Because nursing activity is open interchange at many levels of the universe, the nurse interacts with the person's choices about health. This example of nurse with person interrelationship illuminates the power of people in transcending beyond the actual event in the unfolding of human health. Both nurse and person grow, yet are separate, and health is learned by both suffering and joy present in everyday lived experience. Each person is responsible for personal choices related to health. These choices involve energy interchange with the environment. As people grow in life, interchanging energy with the environment and others, human health becomes more complex. The health status of the individual is reflective of each person's valued choices.

Parse believes there is open interchange between nurse, person, and family. The nurse, with the person and the person's family, co-create health with the environment. The outcome of co-creation of health is change. The nurse and person unfold the meaning of health for the individual. In any situation where a person interrelates with a nurse the Man-Living-Health theory can be practiced. Man-Living-Health is a

perspective for utilizing qualitative methodologies in nursing research to gain an understanding of the meaning of the lived experience.

The method used to study the phenomenon of the lived experience of stress is based on Denzin's (1989) work. Denzin defines Interpretative Interactionism as an attempt to make the world of lived experience directly accessible. It is discussed at this point in order to demonstrate congruence with Parce's work.

This method endeavors to capture the voices, emotions, and actions of those studied. The focus of interpretive research is on those life experiences that radically alter and shape the meanings persons give to themselves and their experiences (Denzin, 1989). This method revolves around persons interpreting and making judgements about their own and others' behaviors and experiences. The interpretive interactionist attempts to see the world and its problems as they are seen by the people being studied. Those interactional moments that leave marks on people's lives have the potential for creating transformational experiences for the person. They are epiphanies (Denzin, 1989). In them personal character is manifested and made apparent. By recording case study experiences in detail, the moments of crisis that occur in a person's life are illuminated. These are often interpreted as

turning point experiences, and having had these experiences, the person is never again quite the same.

Denzin's interpretive research model is existential, interactional and biographical. It is naturalistic. It is based on sophisticated rigor. It can be both pure and applied. It is postpositivist and builds on feminist critiques of positivism. This means that the voices of women need to be heard through the interpretive text. It is concerned with the social construction of gender, power, knowledge, history, and emotion.

This research model permits the discovery of what a particular interactional moment means to an individual by studying the unique person and moments of interaction. The voices and actions of the individuals are heard in the texts and each text is unique, shaped by the individual who creates it. The biographical text permits the discovery of what a particular interactional moment means to its interactants.

This naturalistic research model takes place in the natural world of everyday social interaction. Sophisticated rigor is used as a commitment to making the interpretive materials and methods as public as possible while developing interpretations grounded in the world of lived experience. It goes beyond the single-case method, to analysis of multiple cases, life-stories, life histories, and self-stories.

Interpretive interactionism focuses on the study, expression, and interpretation of subjective human experience. It is post positivist. The observer cannot be separated from what is observed. Interpretive interactionism rejects causal modes and methods of analysis. The search for cause is detrimental to the understanding of directly lived experience. The why question is replaced by the how question. The question is: "How is social experience and interaction organized, perceived, and constructed by interacting persons?"

Interpretive interactionism's mode of expression is in the first-order, primary, lived concepts of everyday life. Situations and experiences that make up everyday life will not submit to experimental, statistical, comparative, or causal control and manipulation. Each situation is novel, emergent, and filled with multiple, often conflicting meanings and interpretations. The interpretivist attempts to capture the core of these meanings and contradictions.

The interpretists' participate in the social world to understand and express its emergent properties and features. For the interpretist any instance of problematic social interaction, if thickly described and connected to a personal trouble, represents a slice of experience for inquiry. Thick interpretation involves going beyond merely stating facts. Thick description involves giving the context of **an act, stating**

the intentions and meanings that organize the action, tracing the evolution and development of the act, and presenting the action as a text that can then be interpreted. A thin description simply reports facts, independent of intentions or circumstances that surround an action.

History, power, emotion and knowledge all play a part in interpretive interactionism. The events studied unfold over time and occur within a larger historical social structure. The structure includes language and meanings that structure everyday interactions. Each individual brings a personal history to the events studied. Also, the researcher has a personal historical relationship to the interpretive process.

History interacts with power and emotions and is embedded in the relationships that make up everyday life. The researcher is given power to enter a situation and make interpretations. The researcher carries the power and prestige of science into the field. Emotion is present in the moods and feelings persons bring to the study as well as in the lives of those who are studied. Detached, unemotional, purely cognitive interpretation is impossible in interpretive interactionism. Knowledge is related to power with those having power creating and defining situations where knowledge is applied. Also, defining what is not knowledge is power.

Denzin's model is an appropriate approach for this study as it is a biographical experience lifted from the lives of ordinary people. Defining the event and the meaning given to it constitute interpretive research, and will attempt to explain life as it is viewed for that person. Interpretive interactionism aims for a concept-free mode of discourse and expression. Its mode of expression is locked into the first-order, primary, lived concepts of everyday life. Every human situation is novel, emergent, and filled with multiple, often conflicting meanings and interpretations. The interpretivist attempts to illuminate and capture the core of these meanings and contradictions.

STRESS

In order to identify the lived experience of stress in a person who has undergone myocardial infarction (MI), it is necessary to define stress and the stress response. This section of the literature review describes stress, the physiology of the stress response and contributing psychological variables.

Stress has been variously defined as bodily or mental tension (Webster, 1990), a nonspecific body response to any demand (Selye, 1956), or as all processes arising from external or internal stresses which impose an overwhelming demand on the organism (Engle, 1987). For the purpose of this study stress was defined as an imbalance whereby person is overpowered by environment or health.

While there is no absolute agreement on the meaning of this term, stress is recognized as playing an important part in both the cause and exacerbation of cardiovascular disease. Lazarus and Folkman (1984), identified that a person's appraisal of stress is the determining factor of whether an event is viewed as harmful, a loss, a threat, or a challenge. Although commonly associated with cardiovascular disease, the meaning of stress in the everyday life experience of the individual has not been identified.

Holmes and Rahe (1967) studied the relationship between stressful life events and cardiovascular disease and illness. Holmes and Rahe's research indicated that persons exposed to life stress events experienced illness in the succeeding six months to two year period. Rahe developed instruments for measuring stress. This study has been criticized because Rahe did not consider the evaluation of the event by the subject. Rahe's study does not take into consideration whether the event was perceived as negative or positive, anticipated or unexpected, or if the person perceived an ability to control the situation. Through quantitative research, the signs and symptoms of stress were identified and categorized into lists. These studies have relied extensively on the use of questionnaires to assess stress.

Physiology of the stress response has been investigated by many authors, Medich, Stuart, Deckro, & Friedman, (1991), Bundy, (1988), Lewen & Kennedy, (1986), Cox (1986), and Southam and Agras, (1984). Much remains unknown. When the brain and sensory receptors interpret an event as a potential threat, the sympathetic nervous system is activated. Increased heart rate, blood pressure, cardiac output and skeletal muscle blood flow results from an increase in catecholamine production. In response to either physiological or psychological stress, the myocardium requires increased coronary blood flow which in turn causes increased myocardial oxygen consumption. In the compromised heart, the increased demand creates an imbalance in blood flow and oxygen causing ischemia which in turn may cause the coronary arteries to become occluded and MI may result (Medich et al., 1991).

Psychological stress can also trigger physiological events leading to ischemia. Medich et al, (1991) describe the following sequence of events. Neural input from sensory organs relay data about the environment to the cortex. Once the cortex interprets the situation as threatening, a neuro-chemical message is transmitted through the hypothalamus to the brainstem, resulting in the stimulation of the sympathetic nervous system (SNS) via the sympatho-adrenal-medullary system. SNS activation affects the cardiovascular system by

releasing norepinephrine at the myoneural junction. Release of epinephrine and norepinephrine from the adrenal medulla also results from SNS stimulation. This in turn results in a more rapid and forceful heartbeat, a rise in blood pressure, and in persons with cardiovascular disease, vasoconstriction of the coronary arteries, thus further increasing myocardial oxygen consumption, and accelerating ischemia. With a surge in catecholamines, an increase in platelet aggregation occurs. Thrombus formation may result, causing atherosclerotic plaque rupture leading to MI.

Simultaneously the pituitary gland stimulates release of adreno-corticotrophic hormone (ACTH) and glucocorticoids which inhibit glucose uptake by peripheral tissue. Water balance, vascular reactivity, immune system functioning and gastrointestinal activity are affected. The autonomic nervous system and the adrenal medulla release catecholamines which facilitate the mobilization of stored fat, stimulate platelet aggregation and adhesion and promote fibrin formation. Testosterone, prolactin, and growth hormone are released which may lead to increased heart rate, increased myocardial contractility, vasodilation of skeletal muscle, and vasoconstriction of skin and organs causing an increase in blood pressure. This may alter renal function and insulin regulation. Intense, prolonged, and inappropriate activation of these

systems may contribute to cardiovascular pathology. Since anxiety, depression, and hostility can increase sympathetic reactivity, these emotional states may contribute to cardiovascular pathogenesis (Medich et al. 1991).

Lewen & Kennedy (1986) suggested that stress often accompanied increased activity in the sympathetic-adrenal medullary and anterior pituitary-adrenal cortical system. They diagramed neural connections between the hypothalamus and the brainstem as important relay points between higher thought processes, emotions, and autonomic nerve centers, thus further explaining the relationship between stress and physiological response.

Cox, (1986), related that the experience of stress often accompanies increased activity in two endocrine systems, the sympathetic-adrenal medullary and anterior pituitary-adrenal cortical system. This activity is related to elevations in plasma concentration. Cox suggested that sympathetic-adrenal cortical activity may be related to loss of power, status or control, supporting the suggestion of Medich et al (1991), that activation of these systems may contribute to cardiovascular pathology. The person experiencing stress may smoke more, show inappropriate eating patterns, and feel too tired to exercise, thus further contributing to the development of cardiovascular disease.

Malkoff, Muldoon, Zeigler, and Manuch (1993), studied the effect of mental stress on blood platelet activity, platelet secretion and aggregation in a study of 40 healthy young men in a 3:1 ratio to an experimental and control condition. After a baseline period, experimental subjects participated in a 21 minute, frustrating computer task (the Stroop test), while control subjects remained seated quietly for the same duration. Blood was drawn from all subjects immediately before and after the task period for assessment of platelet activity. Heart rate and blood pressure were assessed at baseline and throughout the task period. Results indicated that measures of platelet secretion, heart rate, and blood pressure rose significantly from baseline to post task assessments in subjects exposed to the experimental stressor ($p < .05$), but not among controls.

These findings are consistent with the hypothesis that stress may potentiate coronary disease pathogenesis, in part, via activation of blood platelets and their associated effects on coronary artery occlusion and or constriction. Although mechanisms underlying the association between mental stress and enhanced platelet secretion remain unclear, it has been hypothesized that such changes may be mediated by associated changes in neuroendocrine and or hemodynamic factors. Hemodynamic variables have been implicated because

alterations in blood flow may promote the release of platelet products, as well as their interaction with other platelets and with the blood vessel wall. Neuroendocrine mechanisms are suspected because the adrenergic agonists epinephrine and norepinephrine are known to activate platelets. Other agonists known to stimulate platelet function include: other pressor hormones (vasopressin, angiotension II, dopamine); products released from activated platelets (e.g., ADP, serotonin, thromboxane A₂); connective tissue components of the blood vessel wall (e.g., collagen, basement membrane); activated plasma coagulation or fibrinolysis factors (e.g., thrombin, plasmin); and products from pathological conditions (e.g., antigen-antibody complexes. Thus, effects of mental stress on platelet activity may be complexly determined by a variety of platelet agonists, acting both independently and in interaction (Malkoff et al, 1991).

Eliot (1978) studied the effects of catecholamines on the heart with a study of dogs which were infused with various catecholamines. Within minutes, microscopic evidence of contraction band lesions or overcontracted myocardial fibers appeared in a dose-dependent manner. The higher the dose of catecholamines, the greater the number of contraction band lesions. Since contraction band lesions were seen at autopsy in 86% of victims of sudden cardiac death, the link between them

and catecholamine levels was deemed clinically important. One victim was a 79 year old woman who had been threatened, but not physically harmed during a mugging and had died five minutes later. Contraction band lesions were found at autopsy.

Baroldi, (1979) studied 208 consecutive victims of sudden cardiac death. All of the deaths were witnessed, and none of the deceased had been resuscitated, thereby excluding the possibility that the myocardium had been manipulated after death but before autopsy. The investigation found that 86% of the victims had contraction band lesions.

Bundy (1988) examined the factors of age, sex, hypertension, hyperlipidemia, obesity, inactivity, stress, psychosocial factors, and smoking, identifying them as cardiac risk factors. Although these factors were identified, there has not been an attempt to research what that lived experience was like on an individual basis. Stress was thought to occur when the demands on the individual outweighed the ability or resources to cope with that demand. Bundy identified five categories of psychosocial factors associated with coronary heart disease. (1) Sociological factors such as MI and sudden death were highest in men from lower educational backgrounds while angina was reported to be highest in men from higher educational background. (2) Life dissatisfaction or generally being dissatisfied with one's lot was seen as stressful.

(3) Acute stress, death or loss of one's spouse or a close relative or loss in the form of rejection was thought to precede an MI.

(4) Personality factors such as anger trait was strongly associated with angina. (5) Type A behavior pattern was associated with angina. Features of type A behavior were identified as aggressive competitiveness, together with an intense, sustained drive for achievement, a pressing sense of time urgency (constantly setting and working against deadlines) and a sense of hostility to one's fellow man. Those subjects who showed these characteristics were designated type A while those who did not were designated type B.

Personality type has been associated with stress. The type A personality has been discussed since the 1950's as a variable in the development of cardiovascular disease, and was established as a risk factor by two studies, Rosenman, Scholtz (1976), in the Western Collaborative Group Study, and Haynes, Feinleif, Kannel, (1980), in the the Framingham study. A characteristic pattern of behavior was recognized as a prevalent and significant predictor of acute ischemic events. The type A individual exhibits such characteristics as time urgency, aggressiveness, excessive competitiveness, a rapid pace in activities, and rapid speech. It can be seen as an attempt to achieve more and more in less and less time, as well as a behavioral attempt to respond to what the individual

experiences as a threat to sense of control. In contrast, type B individuals are more relaxed and rarely in a struggle to achieve.

It is proposed by Caroselli-Dervan (1989), that type A behavior pattern and stress can cause hyper responsiveness of the immune pathway. Repeated and excessive activation of the sympathetic adrenomedullary system can influence the attenuation of lymphocyte proliferation, influence the ratio of helper to suppressor cells, decrease natural killer cells and affect humoral immunity. This may result in initiation or acceleration of the process of atherosclerosis by increasing blood pressure and heart rate, oxygen consumption, the outpouring of plasma renin activity, catecholamine (epinephrine/norepinephrine), release of fat-like substances and promote platelet aggregation. This may cause narrowing of already atherosclerotic vessels, exacerbate the symptoms of hypertension, promote coronary spasm, influence MI and angina, promote ventricular arrhythmia and sudden death. Type A behavior seems to be a significant predictor of acute ischemic events.

The 30 year Framingham Heart Study, (Haynes & Kannel, 1980), classified people with exaggerated responses to standardized challenges as labile hypertensives; their blood pressure often being higher in the real world than at rest.

These people were referred to as hot reactors. The 30 year Framingham Heart Study showed that labile hypertensives have the same risk of coronary heart disease and stroke as people with established hypertension. Hot reactors were defined as persons who have normal or elevated blood pressure at rest, but an exaggerated blood pressure response to mental challenge. Hot reactors often do not reveal themselves by outward behavior, appearing cool emotionally while going through internal stress in response to daily events. Conversely, any type A persons can be hot on the outside while cool on the inside (Eliot, 1993).

Beach, Nagy, Tucker, and Utz (1988) examined the relationship between life long stressful events and recovery following MI. This longitudinal descriptive study of 41 persons experiencing their first myocardial infarction used two measures of stressful life events: Family Index of Life Events and the individual's perception of long term stressful events via a genogram. Pearson correlation co-efficients were used, revealing that the number and intensity of the person's self perceived stressful life events were significantly, negatively correlated with recovery at three months after MI. At three months after MI, the number of stressors was found to be significantly negatively related to recovery ($r=0.43$, $p=0.009$).

Fleury (1991) studied persons who were attempting to initiate and sustain programs of cardiac risk factor modification. The sample consisted of 29 persons with a focal group of 24 persons who were participating in an outpatient cardiac rehabilitation program. Of the 29 subjects sampled, 18 were male and 11 female. Ages ranged from 25 to 79, with a mean age of 56. Twelve subjects were employed full time, 5 part time, and 11 had retired. One had never worked. Nineteen subjects were married. All had graduated from high school and 14 had some college education. Data collection involved the use of increasingly structured interviews with individuals who were attempting to sustain healthy cardiovascular behaviors. These behaviors included attempts to modify the cardiac risk factors by life style change. Data collection took place over seven months. The person's desire to initiate and sustain cardiovascular health behavior was directly related to each person's motivation (Fleury, 1991). Further study is needed to evaluate what motivation means to the individual as it is experienced every day.

Summary

The literature review described the conceptual basis for this study as Parse's Man-Living-Health framework. In this framework people co-participate with the environment in creating and becoming and are whole, open and free to choose.

Denzin's (1989) model of interpretive interactionism provides a congruent model for investigation of the lived experience of stress. Stress and the stress response were examined. Responses to stress were identified as unique for each person. While stress is commonly associated with cardiovascular disease, what this means in the everyday life experience of the individual has not been identified. This study attempts to rectify that deficiency.

CHAPTER THREE

METHODOLOGY

The purpose of this study was to illuminate the meaning of stress as it is experienced in the everyday life of men who have sustained a myocardial infarction. By making the world of the lived experience accessible and capturing the voices, emotions and actions of men, understanding of stress as it is experienced in the everyday life was illuminated. Denzin's Interpretive Interactionism (1989) was selected as the method of study most concurrent with Parse's theoretical framework. This chapter presents research design and methodology, sampling method, subject selection, protection of rights of subjects, data-collection tools, data-collection procedure, and methods of analysis of data.

Research Design and Methodology

The method used for this qualitative research was modeled from Denzin's Interpretive Interactionism (1989), which emphasizes the dynamic, holistic, and individual aspects of the human experience and attempts to capture those aspects in their entirety, within the context of those who are experiencing them. It is a qualitative, existentialist, phenomenological study. This interpretive study attempted to uncover the common sense reasons for the meanings persons

bring to the turning point moments in their lives. The event, how it was experienced and defined and how it was woven through a person's life, comprise the focus of interpretive research.

Research methods of this approach include open-ended, creative interviewing; analysis of the data; personal experience life story construction; participant observation; and thick description. Thick description means capturing the meanings and experiences that have occurred in a problematic situation. Thick description explains meanings, intentions, history, biography, and relational, interactional and situational processes in a rich, dense, detailed manner. Thick interpretation builds on thick description and attempts to take the reader to the heart of the experience being studied.

Men who sustained an MI were interviewed to determine the lived experience of stress as it affected them in their everyday life. Interpretive materials were evaluated in terms of the following criteria; (a) Did they illuminate the phenomenon as lived experience? (b) Were they based on thickly contextualized materials? (c) Were they historically and relationally grounded? (d) Were they processual and interactional? (f) Did they incorporate prior understandings of the phenomenon? (g) Did they cohere and produce

understanding? (h) Were they unfinished? This study incorporated these terms of evaluation.

Denzin (1990) lists six steps in the interpretive process. (1) Framing the research question, (2) deconstruction and critical analysis of prior conceptions of the phenomenon, (3) capturing the phenomenon, (4) bracketing the phenomenon, reducing it to its essential elements and cutting it loose from the natural world so that its features may be uncovered; (5) construction, or pulling the phenomenon back together in terms of parts and structures, and (6) contextualization, or relocating the phenomenon back in the natural social world. These six steps were followed closely in the interpretive process.

Sampling Method

A purposive sample of ten men was sought. Criteria for acceptance into the sample were as follows: male, age 50-70, who has experienced a first time myocardial infarction within the 1992-1993 year, has been referred by the physician to the cardiac rehabilitation phase II program and who identified stress as a risk factor. A purposive sample of ten men who stated that they were healthy was used as a control group. This sample consisted of 10 men ages 50-70, residing in a rural or small town community, and who stated that they were healthy.

Subject Selection

Each subject was chosen from the cardiac phase II client population. A sign up form explaining the criteria for the research was posted in the Cardiac Phase II rehab area. Criteria for participation in the study were as follows: (a) Men between the ages of 50-70 who had been referred to cardiac Phase II rehabilitation, (b) who have experienced an MI within the year, and (c) who identify stress as a risk factor. These men were contacted either in person or by phone to ask if they would like to participate in the study. Times were then arranged for private interviewing at the cardiac rehab unit. Ten men who fit the research criteria were chosen for the study utilizing suggestions of staff employed in the cardiac rehabilitation phase II unit.

Protection of Rights of Subjects

Permission was obtained from the Human Subjects Review committee at Drake University and from the Iowa Methodist Health System Research and Innovation Advisory Committee. Permission was obtained from each participating cardiology physician group. Ten men who fit the research criteria were chosen for the study utilizing suggestions of staff employed in the cardiac rehabilitation phase II unit. Each person in the sample was given a form explaining the interview, the right to informed consent, right to privacy, right

of confidentiality, and the right to freedom from harm. Consent forms were signed and questions were answered. Participants were informed of the right to decide at any point to terminate participation, to refuse information, or to ask for clarification concerning purpose of the study. This right to self determination included freedom from coercion of any type. Results of the study were made available to participants who desired them. Subjects were assured of confidentiality. The name and address of the researcher was available to participants. The interview and Holmes-Rahe Social Readjustment Rating Scale were completed.

Data Collection Tool

Each participant was asked to score the Holmes and Rahe stress identification scale. The participant was then asked to respond verbally to the following statement: " Please share your feelings of what the everyday lived experience was like in the year preceding your myocardial infarction." The interview was audio taped. The control group was asked, " What was life like for you this last year"?

Data-collection Procedure

Before beginning this study the cardiac phase II nursing co-ordinator was contacted to obtain a list of subjects who met study criteria. A review of charts was done to verify qualifying criteria. A pilot study consisting of two participants

who met the prescribed criteria was done to determine if persons would provide desired data. These results were not included in the study. Each subject meeting the criteria was approached in a private area of the unit; the study was explained, a consent form signed, and permission for taping the interaction was obtained.

Interviews were conducted over an eight week period. Length of interview was determined by the subject depending on the subject's desire to continue sharing thoughts, perceptions, and feelings. The interviews were allowed to come to a natural termination and lasted approximately one to one and a half hours. One of the subjects interviewed requested his wife be present since she had Huntington's Chorea and felt insecure about being left alone. This wife was present for the interview.

Methods of Analysis of Data

The researcher's thoughts and perceptions of the interaction were recorded following and occasionally during the interview. These perceptions were analyzed and included as a part of each participant's case study. The taped interviews were transcribed in their entirety into print. Analysis of the data included life story construction and thick description to capture the meanings and experiences.

The six steps outlined by Denzin (1989) were used in the interpretive process. (1) Framing the research question took place early in the study. The researcher worked outward from her own personal biography as a cardiac nurse and sought subjects who had experienced the types of experiences the researcher was investigating. (2) Deconstruction involved a critical analysis of how the phenomenon had been presented, studied, and analyzed in the existing literature. Both of these steps have been presented. (3) Capturing the phenomenon, included securing the case studies and personal histories and locating the crises and epiphanies, and was completed with the interview process.

(4) Bracketing the phenomenon, by underlining the key phrases and statements and studying these for interpretations was part of the analysis. Bracketing took place several times to reduce the material to its essential elements and to cut it loose from the natural world so that its essential structures were uncovered. The material was taken apart and dissected. Its elements and essential structures were uncovered, defined, and analyzed.

(5) Construction involved arranging the phenomenon together in a meaningful way. Construction classified, ordered and reassembled the phenomenon back into a coherent whole. It attempted to interpret those structures and give them

meaning by locating them back in the natural social world. (6)

Contextualization placed the phenomenon back in the natural social world to give it meaning. Contextualization illuminated how lived experience alters and shapes the phenomenon being studied. These steps, construction and contextualization, comprise chapter four of this study.

CHAPTER FOUR

Data Analysis and Findings

The goal of this study was to understand stress in the everyday life of men who had experienced MI by locating meaning in the experiences of interacting individuals. Deconstruction, capture, bracketing, construction, and contextualizing brought into sharper focus the phenomenon under investigation. These interpretive activities created a body of materials that furnished the foundations for interpretation and understanding the everyday lived experience of stress.

Construction took place as the excerpts from the study were put back together on paper and arranged by the researcher. Actual statements and salient comments from subjects' interactions with the researcher were used and arranged in an order determined by the researcher. Contextualization of the information was done using case studies incorporating how lived experiences alter and shape responses to stress.

The construction and contextualization of each case study is presented separately followed by its analysis. A final analysis comparing and contrasting the case studies ends this section. The control group was also analyzed individually and

as a group and compared to and contrasted with the research group. Patterns and themes were identified, compared, and synthesized, bringing together all of the experiences expressed. Every attempt was made to convey in writing the actual words used by subjects, therefore colloquial terms were used.

Interview #1

I have lived a stressful life all my life. I had an alcoholic father. I lived a dysfunctional life to say the least. My Bohemian mother basically is what held the family together. When I was 12, my home was broken up and I lived with my uncle for a year. I did not graduate from high school and left for the military when I was 18, and that was my first taste of success, really. So, I graduated with a B.A. without going to high school. I taught school for seven years and was going to save the world with that one. I found out that I got plowed under. I was a shop teacher and what I thought was preparing children for a trade was just a dumping ground for the problem children. I decided it was counterproductive and that I could do better elsewhere.

Stress was heavy this last year. Just before my heart attack, my wife and I had a three week completely stress free vacation. We had a wonderful time. It was completely stress free. After we came home I had the heart attack within one week. Things had gone along smoothly and I come home and

found my daughter and our grandchild had moved into the house. She is a very difficult person to deal with, but she just moved in. Anxiety lasts as long as my daughter is shouting. I'm out of phase from where I should be in life. When my daughter left us, for three or four years we didn't go to church. I was ticked with God. At that time, there had been a lot of stress. My daughter got involved in drugs and ran off. We'd just had 17 family funerals in two years. It was depressing. It was down. It's like a battle that goes on and on and who knows where the breaking point is. I think my body is getting older and is not able to handle all the stress. That year I cut out the good things, the fun stuff. I worked two jobs with no days off. My income was going backwards. The pleasant surprise from my second job was that I could then sleep. My life from day to day was one of b.s. I'm a survivor. I attribute that to my Bohemian mother. Bohemians lived 300 years under captivity. They're stoic survivors. In the military, we had equal ground. We had money. We had influence. Military was good for me. I think my daughter could do better than I because I think she's sharper than I. It was war about how to handle money. My wife and I always put our heads together and decided how we could do, but she and her husband had their own money and every item was war.

That year before my heart attack, I exercised about four miles a day and had my weekly meeting with Alanon. Usually the talking would take care of it. I tried all the things that usually help. It was still there. Two days before my heart attack, I had my regular check up. I told the doctor. He didn't have a lot of time. He asked me if I went to Alanon. I said yeah.

Analysis of Interview #1

In this study, chronic and long term stress was followed by a three week vacation which was completely stress free. Upon arriving home, stress returned suddenly as he found the daughter and grand daughter had moved into his home. The presence of chronic stress, a period of freedom from stress, and then an additional overwhelming stress seem significant. Anger at God is expressed as well as lack of control over life circumstances, financial worries, underlying anger and helplessness. The second job was noted as a surprise benefit, making him tired enough to sleep. Success and security derived from being in the military is contrasted to insecurity in civilian life. Family pride, having a strong Bohemian mother, is attributed to feelings of success and stability in his own life. This is contrasted with the present generation's lack of values and inability to cope. He gave up teaching because of value contrast. Two days before the MI, a regular physical examination did not prove diagnostic, but a possibly intuitive

attempt was made to talk to the physician concerning stress. Lack of time was a factor for the physician. Coping attempts included attending Alanon, exercise, and communicating stress to the physician. Holmes and Rahe score: No items checked.

Interview #2

At a time when everything seemed to be going just fine, two of our children became divorced. Both looked to Dad to be the fixer and both were in financial straights because of that. It stretched my wife and I's finances as we were just coming into retirement. It came at a time when everything seemed to be going just fine. In addition, my mother had knee surgery about ten years ago, and that did not work. You finally make that decision with your mother to go on into the nursing home. It's something that I don't know if we were more reluctant or she was. As a minister, I could have retired but because of church growth, was requested to stay on another year and then another. I've always had to have my work done way ahead of time deadlines, and people kind of expect that. My wife and I had always complimented ourselves on having seven children and have things run smoothly. It was a complete surprise. I feel that it was my own fault. I've always been a person that finishes any job that I take.

Usually my wife would talk when my daughters would call. I felt that my wife should fix her own problems and not

look to me. I felt a lack of energy. I did not relate this to my wife, but the kids sensed that whenever this came up, that I reacted differently. I'm sure it did have more influence on me that I'm a minister. You stand there, and you marry these couples and you hope and pray. Yeah, it was like failure. I felt like the sole person carrying the whole load. My wife is a very caring person and wants to have things fixed and then part of the problem is then that I'm the one that is supposed to get it fixed. We have a good relationship, but up until this point, most of the things that needed fixing, I was able to handle, but I couldn't put this back together. It was not continually on my mind. It was only after phone calls from my daughter. It then became a problem for two days. It affected our relationship because it made her feel so sad and she carried all the sadness with her too, but I had the ability to leave and get involved in the parish and put it out of my mind, where it wasn't as easy for my wife to do that. It didn't go away. It just continued. It took a two year process. It was not the first thing in the morning that crossed my mind. It was only when we had to discuss it. We had two just huge problems. Both divorces at once. We'd kind of get one stabilized and then you had to work on the other. I have a good genetic history when it comes to longevity. I have never missed a service for sickness. I lived as though I was indestructable. I'm a workaholic, at work

seven days a week. Discussions were open within the family. It was not discussed with friends. It was just like a new experience for me to just feel that I don't have the energy to carry this ball. It felt like a weakness. Bodily weak and just plain incapable.

I drank an awful lot of coffee, 12-14 cups a day. I felt this weakness. This is heavy. I just wished that I wasn't being bothered and you never could really say, it's fixed. The problem stayed there. You worked at it and then you got another little piece of the puzzle done, and then the grandchildren would hurt and, my wife could not do that, separate herself. It was a turning point in our life. We have had no problems and then we got hit with a double lightening. My wife has always carried things inside and it would take her two days to really get over the hurting. It completely occupied her thoughts. I'd come home, and that's what would be there.

I also noticed this past year that I had less tolerance for youthful exuberance. Confirmation has never been a drag. I have always enjoyed youth. It was the first time I could identify with I don't look forward to this class. I felt bad about that. I knew that this was going to take more energy that I maybe had.

Analysis of Interview #2.

Findings from this study demonstrate that stress was recognized as sudden and unusual, although the chronic stress of his mother's failing health had been chronic. Dealing with the stress of his mother's failing health, and nursing home placement, as well as with the divorces of two children, and with his wife's stress was overwhelming. He states that he felt weakness and lack of energy as well as lack of enthusiasm for working with youth. He felt responsible to remedy the situation and felt increased stress as a minister. His wife's inability to cope with the situation challenged their relationship and frustrated him more. He relates that his wife was home all day, whereas he could occupy himself with his job. Support outside of family was not elicited, although family experienced increased stress dealing with the situation only within the family. He increased his coffee drinking and ceased doing activities that were fun. Weekends were spent visiting children to try to fix the relationships. Holmes and Rahe score: 45.

Interview #3

Financially, I made more money that year than I have ever made before in my life. Personally, I had some problems with a family member who's had some alcohol problems that I

don't want to deal with in depth. An unbelievably difficult situation, a 14 year old problem. It's gotten worse. Just intolerable. The problem drove me to a compulsive level businesswise just to avoid and be away from it. I dove into work every chance I could. I took on added work load and I took up golf. Just hittin the golf ball as hard as I could, as violently as I could. It was compulsive. And it was kind of a release, and yet I was playing so poorly and I was pressing so hard that it would become a real major frustration for me. I had my MI on the golf course, by myself. Late one afternoon after putting in a very long hard day, I had my heart attack and laid out there 30 minutes before anyone found me. I absorbed myself in deep meditation and prayer. I knew I was not going to die.

I've been skiing at high altitudes. Now I'm talking hard skiing up in the mountains without stopping. It was all challenge. Just fun. Then I was notified that my work place was being torn down and that I was to be evacuated along with 30 other tenants. I didn't have time to find a new office. I moved all my business to my basement. Well, every morning was stressful. You go down stairs in your robe, not your business suit. Finally, I found another office. So, I'd been in my new office a week before my MI. It just wasn't--It was like my family was inside at the movie and I was outside on

the sidewalk. I was tired. The alcohol problem, behavioral problems, the office thing, plus the ongoing dilemma. Then my mother in law died of a sudden massive MI. I flew to her funeral 1,000 miles away, and back as one of my sons was graduating. Then, the following week, I could pack up and leave the last of my four children. This is heavy duty stuff. I think my spirit has just been worn down over the last 10-15 years. The alcohol problem was the worst. Many times I felt I'd rather die than have to deal with it. I went to the golf course, worked all hours, traveled, went to the office thing. For a lot of years, I smoked. Last year on a business trip, just because of strain and everything else, I bought a cigar. From that night on I smoked one cigar a day. It gave me something to fiddle with other than my own thoughts.

It just became more difficult all the time. Some of my family members were affected as well and put heat on me to do something. As they gave up, I felt like I just left them and couldn't do anything. It became a crushing defeat for me as I saw them give up. Felt the whole thing was basically on me.

I remember lying on that golf course saying I am not going to die. I had an in body experience. If you're fortunate enough to be conscious, your thoughts are pure thoughts, because you know there's nothing you can do. It's like at that moment, you have this ability to think all these really pure

thoughts. It doesn't really take any courage to lay down and die. Where the courage comes in is to be able to live a really good life. In being able to say your behavior is more than I can handle, that's courage. That's honoring yourself and not punishing yourself for someone else's behavior.

You can let God have some things, but sometimes God gives them back to you. He says, I don't want this. That's when you have to, totally have to, walk away from it.

About a year ago, the breaking point occurred ten days before Christmas. I approached the individual in a stand off. Nothing happened for a week. I've never had such a week in my whole life. Treatment started 10 days later. Every day I had phone calls and unbearable days. After two weeks, a faint glimmer of life and things softened up a bit. a turning point began with treatment. The next two weeks were pure hell. Things got better for a month. Then another big time episode.

Analysis of Interview #3

In this case study, several unalterable stresses occurred with some being good stress such as making more money that year. He lists the major stress as the alcohol problem of a family member, with the burden falling on him alone when the rest of the family gave up and urged him to do something. Coping methods included cigar smoking, compulsive golf and increased work hours in an attempt to escape and distract

himself. He noticed periods when stress lightened for a week or two, and then increased, becoming unbearable. Will to live, and insight came while helplessly awaiting assistance while lying on the golf course following the MI. He lists a turning point 10 days before Christmas when action was taken to deal with the alcoholism problem. Holmes and Rahe score: 182.

Interview #4

Its sorta like you got hurt in an accident or somethin'. You don't get better by thinking about it. That was the year we came from Florida. It was a little up and down like getting relocated. I was discharged from the Air Force. They wanted me to stay and go to another Air Force base. I didn't care for that idea. I already had a house on Long Island and a job there. When things got kinda bad out there, I went down to Ft. Lauderdale where I used to work. I had six more months to go and I didn't want to re-enlist, so I was out.

Alot of times I had to use chemicals and I had'da breathe that stuff. I had to mix the paint and that got to me. Alot of 'em smoked there then. I worked 8 years there. The chemicals were worse than the smoke. We wanted to get a better place rather than downtown loop cause there's too many kids running around breaking everything up at night. Those old buildings being burned by kids living there. I wanted a safer place to live outside the loop somewhere. I don't have a car

now. It makes it a little more difficult. We had a hurricane in Ft. Lauderdale last year. Come up here and have flood. Also, my wife's health. She has Huntington's. Her mother died of Alzheimers last spring. I have the whole burden. Switching over from working to retiring, wonderin' if the money's gonna work out alright. It's like the time I was shot. I worked at the convenience store in Ft. Lauderdale. That's the reason I wanted to leave there. I had allergy attack after I got here. They couldn't find nothin' wrong, sent me home. The fireman downstairs left his stove on and went to work. Five months later I had my heart attack. I noticed I was gettin weaker all the time. Then I got shingles. Everything all at once, the move, and everything and the money and retiring. Solve one crisis and another one pops up. Not just food or what you're gonna eat, but leaving there and makin the trip up here. Just makin' the move. Its the whole thing that ya go through. You're in it by yourself. There's no one to help you out. You wonder what's gonna be next. How you're gonna do it. We had to live in a motel awhile. I blotted it out from my mind. I just put it to the back of my mind. My blood pressure climbed steadily after I got here. I figured maybe my diet was causin' my high blood pressure.

Analysis of Interview #4

Findings from this study noted relocation, lack of money, housing, and car, lack of social support, wife's failing health, low socio-economic condition, lack of education, and own health problems contributed to overwhelming stress. He identified stress as the cause of his MI. Chronic health problems may be job related, caused by exposure to chemicals and second hand smoke. Possible warning signs of increasing weakness, asthma, shingles, and elevated blood pressure preceeded the MI. He felt he was carrying the whole burden alone. Moving from Florida to Iowa was a turning point experience which triggered overwhelming stresses. History of employment in the Air Force was noted to lend stability and security to his life. Holmes and Rahe score: 254.

Interview #5

The work situation had been a little more stressful this year. Also my mother has advanced alzheimers. I put her in a nursing home three years ago. She's still there. I've been spending alot of time over there, feeding her, and watching her go down hill. This has aged me. Feel alot of guilt just putting her there. She doesn't know me now. My brother and sister are out of state so the whole thing fell on me. The doctor could

see it working on me and told me to stay away from the place for awhile. It'd be better if she was gone.

Then the work situation. This summer's been really bad, with all the rain. It's been very stressful traveling and covering home base too. I knew it but I just kept sticking to it. I think it's just a combination of everything. I'm at an age where everything just kinda catches up with ya. I've never been one for exercise. I keep everything inside, let it eat me up. I've been a heavy smoker since high school and four years in the navy. I never woulda went to college if I hadn't gone to the navy. It matured me quite a bit.

It'd really take a load off me if my mother would pass on. It doesn't help to go, but I'm still over there every day. I kinda resented the fact that my sister hasn't come back to see mother. My wife's very supportive.

I hadn't felt good for several months. I made a decision to quit the Country Club. I was tired of the same old thing. I quit the Lions. I hadn't been feeling good. I just wanted to withdraw. You aren't feelin' good and you don't really want to be around alot of people, you know. I think I lost some energy. I found myself really gettin' tired at night. I hadn't been sleepin' real good either. I'm always pooped when I go to bed.

I feel obligated to go to the nursing home even though the doctor told me to stay away. I don't feed her anymore. I

roll her around in the recliner. I always feel a little better when I've been there even though she doesn't know I've been there. I grew up in a very religious home. My mother was very strong Lutheran. My dad was Missouri Synod, strict. I think of myself as a pretty good person, but not very religious.

It was just a combination of a lot of things, my family history, my lack of exercise and eating habits, my lack of communication. Sometimes I'd like to leave, but then I'd worry about her.

Analysis of Interview #5

Findings from this study show that he feels responsible for caring for his mother alone with little support from siblings. He relates job stress and stress from placing mother in nursing home. There is conflict with doctor's advice concerning whether he should visit or not. His wife is supportive. Insomnia was experienced preceding the MI. Quitting the Lions Club and golf were attempts to remedy the situation. Holmes and Rahe score: 46.

Interview #6

Oh, I would say I was extremely busy teaching. There were certainly a lot of times when I felt I didn't have enough time to do everything. It wasn't just this year. It's been that way for 8-10 years at least. I did a full teaching load on top of filling in for a faculty member who resigned. I can't say that is

was all stress. I wouldn't say that teaching was stressful. I would say that teaching is on the other end of the scale as far as stress. Just the time was stressful.

I don't know. I certainly haven't had a history of really high cholesterol. I had a physical, a thallium stress test and the whole works as part of a routine physical. The doctor didn't quite like the way it looked and he didn't like the EKG changes although the thallium test was fine. I didn't show anything.

There were times when I felt it was too much. Most of the time, I'd figure how to squeeze family time in one way or another. I eliminated some of the good relaxing goofing time with my family. I noticed it mainly the evening before, maybe just a little bit of weakness in the left arm, certainly no pain. Then I got up at six o'clock that morning and just didn't feel too well.

I have a hard time believing that just in the two years that that's what brought this on. I had enough things going on where the schedule was extremely full. Oh, yeah, my self talk was all hurry. The time pressure was there. I never had trouble sleeping. The time thing was the only thing. The key one is time pressure.

Analysis of Interview #6

Findings from this study identify time pressure as his only stressor and biggest problem. He eliminated some of the good relaxing, goofing time with family and did not disclose family or personal feelings. Holmes and Rahe score: No items checked.

Interview #7

This year's been 'bout the same as always. I had more stress away from work than I do working. I've noticed that. I've noticed different things bother me. I drive down the street 'n cut their 'n it bothers me (talks in incomplete sentences). 'N if it's city property and it's not mowed, it just bothers me. (talks in incomplete sentences, fast, with lots of laughs in between) All of a sudden it just came on. I didn't know anything. But no big changes. My boy got married. My wife works nights and I work days. I noticed I was gettin' alot tireder. Yeah, I was gettin tired 'bout seven.

'Course I smoked alot. When you get stressed out, you smoke alot and you shouldn't. I puffed about a pack a day. Up to 2-3 a day. I just smoked continously. I smoked cause I's anxious. No money problems or nothin', never argue. I don't know what I was anxious about. There musta' been somethin' underlying there. I still don't know what it was. Yeah, a little

more nervous, short with people. But I don't take it out on people. If I'm mad at someone, I just walk away. Something in there was just not quite right. I can't figure it out. Probably gettin' old. I hate gittin' old. Couple days ago, I was 35-40. Now I'm 52. It's hard on ya. Just last week I thought about it. It sure got me down. Just last week I went over to Omaha, took my wife to the zoo. They sold me a senior citizen ticket. It about got me. It was an accident. I just went over there. She asked me how old I was. It got to me. I thought, Oh, my God. I think of 52 as being old myself. But I don't want to die. Sure don't want to get that old. My Dad died bout 45 with diabetis. My brother had a bad heart 'bout 45. He ain't got much longer to go. He knows it so, it just come with divorce and everything. We used to go out and have fun together. All of a sudden he can't do nothin'. Drive a car to the drug store. That's about it. Now if somethin' happens with my bad heart, if my wife should retire, we wouldn't have no insurance. My wife wants to retire. I haven't never been sick for a long time. She'll have to work another year to make sure I'm okay. Ya know one thing I worry about, and its getting better, but I thought when I walk outa here, I could drop over dead.

In the springtime, I just didn't feel right. Probably alot to do. Dreary weather. It just didn't jibe. Just can't put your finger on what it is. I'm a great one to stay away from the

doctor. I could just sit down and fall asleep. No exercising, smoking more, didn't eat that much. I was throwing up alot more. Throwin' up alot more'n I used to but I just could be sittin' home watchin' and after eatin' supper a coupla' hours, just run in and throw it all up. Do that three or four nights a week. It never seemed to bother me when I had been to the doctor.

I like to get things done. Whatever I do, I like to do 2 or 3 things at one time. But I done that nearly all my life. I'd be mowin' the yard, washing the car at the same time. I'd mow for 20 min. and then work on the car, then go back an mow a little bit. I said oh, I'll paint this window over here on the shed. If I'm gonna be outside, I'll do three or four things, an finish 'em all. But you know, I run from one to another, kinda run between, then I'll sit down'n rest then sit'n smoke maybe half pack cigarettes. I never did stay at one thing long enough to finish it though. That may be stress too. Everybody was noticin' this more before my heart attack. Why are ya working on the car when ya still got the lawn mower sittin over here? Now I just let it all go an' I don't care about it. So maybe now I'm worse off than I was. That's my problem. I just want it mowed one way. Mow the grass all in one direction. If someone else does it, I don't like it. People's always said I been nervous. I used to drink alot, but I've quit that. I don't like

being touched. You look for people that don't touch ya. That hand on your shoulder stuff. I don't really want her (wife) to. I've seen people drink out'a other people's glasses. I can't take that. It just bothers me. Just little stuff bothered me.

The night I had the heart, I was workin' outside and I don't like to do stuff on Sunday, and its Sunday. (Denies religious faith, but believes you should have a day of rest). I us'ta go to church when I first got married. My folks were a bunch of Norwegian folks. They went to church. I've only worked about twice on Sunday. This was one of them when I had my heart attack. I was more tired and probably more edgy. But no big changes. I've seen her for probably two weeks at a time. And I can't take it. I'm used to being alone. We don't argue or nothin'. Good marriage.

I work on an old corvet for fun. In the year before, I worked on it alot. I hired alot more done on it. Outa the pocket. I put alota money on it. Its a money pit. It makes you feel young to get out and burn the tires on it. I just usually get it out and go around the block 'bout 6 times before someone calls the police'n then put it away.

There really isn't much changes. You're more hyper a' course. I did know something was not right. More cigarettes and coffee. I'd get up and drink some pop for breakfast and I'd

smoke, and I'd think well, now you have to face that damn traffic, so I'd just sit there.

Analysis of Interview #7

Findings from this study show the person talking fast with broken sentences run together with laughs between. He did notice something was wrong, was tired, edgy, smoked more, and drank more coffee. He experienced poor concentration with short temper and inactivity and was throwing up four to five times a day, although he did not consult a physician. He took pride in not seeing a doctor, but worried about getting older. He expressed that his father and brother had heart problems. Although he could not pinpoint stress, he knew something was wrong and still is. There is conflict expressed with being raised going to church, yet says he is not religious. Also he maintains that he needs a day of rest. Holmes and Rahe score: 53.

Interview #8

You wanna go back two years? Cause it really got tough for me. My father died. His estate...I ah had a computer system over where I work that was inadequate. I worked about 12 hours a day 7 days a week. Usually work 40 hours a week. It was so slow you couldn't get anything done. It was an extremely frustrating thing. (loud laugh). When it took 21 hours to run a report, you couldn't get anything done. Then we

started putting in a new computer in '92. About that time I had the heart attack, these things had kind of planed out.

All this happened two years before the attack. But everything was back under control. About four months before the attack everything seemed to be under control. Because you were back into control, and could get things done. Like somebody really lifted a big weight off your shoulders. You went home, you did your normal routines and those kinds of things. Sleep? No, I didn't sleep. I was restless (longer than 2 years). I don't know why I'd wake up, maybe my sinuses would plug up, maybe you'd roll over or somethin'. I contend that we have bad air in our building. Four people have had bad sinus infections in our building. I've had sinus problems all my life, but on two occasions my nose would drain constantly and you couldn't work. Where you would blow your nose constantly, throw it down, and you'd have to pick up another kleenex where you couldn't work. I went to the doctor, had a physical and all this kind of stuff and came up with absolutely no diagnosis for what caused it. He prescribed chlortrimeton. Then I started taking vitamin C and haven't had any problems since. Maybe one subconsciously deals with it. Its like my job. I am the financial guru. I have control of it. That I don't even think about. I do not go home and dwell on it. That is the least thing I think about, and yet it's the most

important. I'm in charge of the building, and I'm in charge of the secretaries. And I make the thing work. It's all this other garbage. I'm a business manager, so I deal with all these things. But you keep getting added more to you all the time. When the computer was slowed so bad, it'd take a minute or two to make an entry. It was so frustrating. And when you'd tell your boss, and he'd just dismiss it like, and you dismiss it like it doesn't make any difference, you just go crazy. You're life is tied to it. Most of the stress is job related.

In August, we'd just finished our annual audit report and I'd filled out all kinds of files of paper lying around and my stomach muscles were painful. The doctor just gave me some muscle relaxant. Then everything was going along pretty good and then I went into a cold sweat. Then walked a block, felt good, cleaned up, took a shower, shaved and thought I'd just swing by the emergency entrance and I walked through the door and I was only on the one medication, the muscle relaxant, and I was talking to the secretary. She said, can I help you? I said no. I did feel kind of a burning sensation under the rib cage. And I said no, and the next thing you know, there was the wheel chair. Whatever you had taken, you couldn't even roll over. It felt like you closed your eyes and like red hot hooks around your abdomen. They wheeled

me into the ER. I'm saying, hey, what's going on here? The next thing the doctor says you had a heart attack.

The only thing outside of work was settling my father's estate and the lawsuit. That was stressful, that I still deal with, and I will deal with until this other thing dies. So every month I write a check. You just line things up and take it on with both hands and you take one thing at a time and you try and deal with it.

I essentially followed a diet, stay trim type of thing. I had 3 six mile courses around the city marked out. And I'd work on it. There is stress laid on there by the heart attack. I know there are a few other arteries that are blocked. You think about it, and it hits you every day. I'm going through the procedure, but my mind still denies it. Every day you think about it. Its just like a black cloud hanging over you. I felt bad. I wanted to sandbag, but I knew it'd kill me.

Too many things have happened in my life. Its almost like I've never had any control over my life. I've had many death encounters. I was involved in an auto accident while going home on the freeway. I coulda' got it right square. Just bruises though. These encounters have happened all my life. A guardian angel has to be watching over me. I'm here for some purpose. I'm not sure what it is. It never scared me. It happens too quickly. Afterwards you get irritated and

frustrated. Those damn insurance companies darn near lost me. Somebody else screwed up. That really gets me.

I woke up on the operating table while having my appendix out. I knew where I was at, and I do remember the doctor saying, Oh, there's a nice appendix. I was shakin'. I thought, Oh, no way. It felt like you were frozen, and like there was a knife, and he said, I'll give him something to warm him up and I was gone again. But it's like this heart attack, a cold sweat. I knew I was in trouble, so I punched the button and the doctor came in and he said we're going to have to do this angioplasty. It didn't scare me. Its like the decision was made by someone else. The battle was scheduled and the field selected and nobody bothered to tell me. There was no choice for me. Either you do it or ya end up in a body bag.

From the military, you get a discipline, self discipline and a self confidence. I think it sticks with ya. And you look at life a little differently.

Self talk? Doing chores every day, get this, this, this and this. Get it done. Routine that kept order in my life, and then you dealt with lawsuits and this and all that on top of it. You did what you could, all you could at that point in time and then you did something else. I knew that was a lot of stress there, but I kind of categorized it and dealt with it. Maybe I was irritable at times. I imagine I took it home with, and you know

on those walks and stuff, I found that to be a good relief. Since I'm not a boozier, smoker or caffeine, I guess I turned to exercise. I would start a project like paint a room and finish it even though I was tired. 'Cause it wouldn't get done unless you did that.

Alota people retire and then...there may be an anxiety there and it may be that you've lived there on adrenalin or whatever it is all those years and all of a sudden you take it away. It's like being on medication and then you take it away. My body....before the heart attack...my body did what my mind told it to do. Since the heart attack, my body tells it you're not goin' to, but the mind says you are. The stress was definitely better after we got the new computer in, the lawsuit was settled, and the auto accident. Ten months had passed. Everything had planed out. It's just like you lived on adrenalin or whatever your body could so darn long and all of a sudden, you don't need it any more and your body says you do.

I carried alot of the burden alone, but as a sounding board, the bookkeeper and I have been together for 24 years. She's been through some crisis too, so we both know each other, yeah, we talked. I don't have a fear of gettin' older, but I do fear that I had heart attack at age 55. I'm angry at that. Everyday, I think about when I go to pick up a piece of furniture or something. My father died in the 1980's of a heart

attack at age 80. He smoked every day in his life. He was an alcoholic. I'm a middle child, an unloved child, an unwanted child, the hand me down child.

Analysis of Interview #8

Findings from this study show chronic stress included father's death, the estate settlement and lawsuit, and the slowing computer at the office. Four months before, everything was back to normal. Stress had planed out. The muscle relaxant may have relaxed heart muscle. Routines kept him in a sense of order. Exercise helped. He experienced sinus problems with episodes of continous drainage and consulted a physician. Also, he noted irritability and sleeplessness. He felt many near death experiences throughout life. Being in the military helped him find self discipline, and self confidence. This person was unmarried and felt he carried the burden all alone. He did confide to another person. He displayed family pride in having a smart Norwegian father although he was alcoholic. His mother was described as open and you could ask her anything. He mentioned loss of control in his life. Holmes and Rahe score: 127.

Interview #9

Stress? No, I don't have alota stress. I really don't. Just small things kinda irritate me a little bit. I gotta little dog that's got some problems. But I don't have any children. The

little dog's got Cushings disease, but she's got chemotherapy. It's a little dauschund. And that's been our concern. You don't have kids, the dog's our concern. She's 11 years old and ever since we got her ya know she's had something wrong with her basically. She had to have a kidney removed, and later she had something wrong with her eye, and then she got this Cushing's disease which you know kinda breaks ya down a little bit. Probably sounds strange, but well, they do become part of your family. If I had any stress, that would be it, basically for the last 11 years. I basically try to eliminate stress. I usta' belong to the Elks, Lions, Moose, Casey's, every other organization, Chamber Commerce, Jaycees, be active all the time on that. And then that began to get to me. And I cut that back to the point where I don't belong to hardly anything. That idea about being tied down and just havin' to do it when you might not feel up to it. But then I gained a little weight and probably didn't exercise like I shoulda'. I can handle big things. The little things get to me.

One thing where I might have gotten a little worked up was in the spring when some guys came here sellin' trees. I bought some and finally the trees were all staked out and that's the first I ever felt any chest pains. We found those guys were total frauds. Some people just looked at that, but there was \$312 that irritated me. We're gonna' try to go to the

attorney general and get something done. Basically, it cost me \$300. I try not to get too worked up. I had those little feelings since April. I thought they were indigestion. They always came on after I ate. I'd usually take tums and they'd go away. I was concerned. In fact, even in my briefcase, I had a thing on MI's that I was gonna read. Go up to the library and got some literature. Can you imagine? Yeah, the medical library at the hospital. I had some inclination. I'm a dentist, so I know chest pains aren't to be taken too lightly.

The year before, the last couple of years, I kinda let little things irritate me more than they shoulda. Disorganization, that real really...that irritates me bad. I had not changed my exercise. I quit smokin' 30 years ago. I quit drinking. I'm loosin' weight. I think I wasn't active enough. Usually if I would go to those meetings, I would enjoy it, but it was kinda irritatin' that I was committed for all these different things, and I didn't like that.

I did dwell on the irritation. Usually if somethin' kinda irritated me, I would kinda vent that. I'm not the type to let it build up on me then explode. Usually my wife hadda' listen to me. She should get a medal. I suppose my co-workers around the hospital, I usually sound off about something if I don't like something. I gotta learn to cope with a little more things. Not let it get to me. How do ya do that? My father was that way.

He had three heart attacks, one when he was 42. He died at 59. I'm 60, so that perturbs me too. I've had that on my mind a little bit too maybe. In fact I have had that on my mind alot. I wanted to make sure I was covered, so I changed my insurance to Blue Cross and Shield because they cover coronary by-pass. The reason I mentioned that is because I've had that on my mind alot.

I liked the order and discipline of the service. In fact, later I tried to get back in and at age 33, they said you're too old. Makes you feel bad. Too old. So I went into Veterans. Its got alotta good points. It's structured and its secure and there usually aren't any surprises and it is very disciplined. It makes life smoother.

I don't attend any church. But I do have faith in God. I think about it alot. It's definitely a comfort. I'm glad and just talkin' to you too, I think has helped me in thinking about it.

Analysis of Interview #9

Findings in this study show the person was disturbed by the little things He begins by denying stress. Stresses include irritation by little things, health of dog, and too many scheduled activities. His father's death bothered him a great deal. He stated that talking to the researcher helped. He enjoyed the discipline and order of the military and tried to get back in. The closest he could come was to be employed in the

VA. He is irritated by disorganization. Faith in God is expressed although he does not attend church. He credits wife for listening. He went to library to look for information on MI's, seeming to have a premonition about the impending MI. Activities were eliminated in an effort to relieve symptoms. At that time, he also cut back on exercise a little and gained weight. He ignored little chest pains that came on after eating. He took out insurance in a larger company that he knew covered by-pass surgery. Men who defrauded him with the tree purchases continued to bother him. Holmes and Rahe score: no items checked.

Interview #10

There was no real big problems the year before my heart attack. My wife and I a couple 'a years before that had a few problems. Right before my heart attack I had a few problems at work and still do for that matter. And that was very stressful. It goes back to all my life there was stress. In 1986, I went through a real stressful period with work and didn't have high blood pressure. When that period kinda died down, I went for a physical and had high blood pressure. I had worked for a department store and was in charge of a building project. There was alotta pressure and stress in that. Then I went through a period of what was just normal stress. A

coupla weeks later was the first big stress I've had for many years that was this intense. This one I'd put at an 8 or 9 level.

What happened, I was told some things regarding my job and regarding me and the position where I work as being somewhat threatened. This was two weeks before my MI. And totally a real surprise to me. I had no idea where it was coming from, and then all of a sudden there it was. We had left for Florida on a regularly planned vacation. My MI happened 5 hours after I arrived there. The stress is still there, but I'm sort of resigned that there's nothing I can do about it. When my job was threatened, that was stressful, because at my age, well, I guess it caught me by surprise because I had no idea it was going to happen. In the meantime, the person I work for has been let go, something that causes more stress. There was something that possibly at that time, that I might possibly be let go. We never had a conversation at that time, but that caught me. Up to that point everything was wonderful, fine, great, and then all of a sudden this happened. I don't know why this happened. Unfortunately, in this day and age, I don't think company's reciprocate. They're there and you're just filling a slot, and that unfortunately, didn't seem to be that way. It's not that we'd like to make more money. You do, I do, everybody does, but you'd rather feel you were a part of something or feel that you're making a contribution, really

have security there or whatever. Up to that point, I didn't have stress. The doctor said it would have happened anyway.

In Florida, I suppose there was a relief that I was there, and it was relaxing, but by the same token, I couldn't help but be concerned and worried 'bout what would happen. Really concerned that something would happen while I was gone.

Nothing out of the ordinary happened that last year before my MI. We had moved in May, almost a year earlier. Nothing stands out in my mind except this family related stuff that was a carryover. I didn't sleep as well as I had been two weeks before. I know I didn't sleep very well. I told my wife what was going on. But its always stressful to tell somebody, particularly for men, because they'd think I'm a loser, or what the hell, but in this day and age, its alot different. Alot of it is just me putting it on myself I think. There's nothing you can do. It was confusing, because I would talk to this person I work for and not any other person. I never really got to what the problem is. Well, it's, am I still going to be here? Do I have the job? Am I going to be gone? And I still don't know the answer to that. One of the things at work, there's nobody at work where I'd go and sit down and say, I'd like to talk about it.

Military, I liked it. I think there is some truth that you don't think about not being secure. You don't think about that,

and obviously that is not the case with business today. The companies don't care now to the extent where the older company cared about people and was concerned about somebody in the family was going to die, and I think that's gone. They're so concerned about things, keeping their status, and keeping costs and all. Pay is down one of the lower things. They're more concerned with how they're treated, or how they perceive how they do their job. Nobody comes around and says, you did a great job anymore. I felt like was in it alone.

My mind was pretty much on that problem that two weeks. It was always in the back of my mind. That day was a tired day, because the plane left at 6:15 a.m., so we were up at 3:30, and we were down there, and this happened late, so by the time we'd left Chicago, flew down to Ft. Myers, got the car, it was a stressful thing. We stopped and ate, had a late lunch, stressful thing, we'd unpacked. We were tired. I was tired.

Analysis of Interview #10

Findings show that he was stress free, then job threat stress came. This was on his mind constantly for two weeks before having the MI. Before that everything was wonderful. He had relaxed slightly after arriving in Floria for vacation, then five hours after arriving, had the MI. He experienced insomnia, and knew he was tired. He felt anxious, worried, helpless, in it alone, and had no one at work to confide in. His

doctor said it would happen anyway. He credits the military with security. Two years previous, he had marital difficulties which were resolved. He smoked for 30 years. He is a church member although he doesn't attend church. Holmes and Rahe score: no items checked.

In the preceding section, construction and contextualization relating MI to stress was uncovered via interviews, with analysis following each interview. In the following section interactions of the control group interviews are uncovered and analyzed.

Control Group Interview #1

I think its been a stressful year. Hada' alota things that'a didn't go the way I'd like ta see 'em go. The FHA's been tryin' to foreclose on me since April. I've had two hearings. They've been unsuccessful so far, but we haven't resolved that yet. Farming didn't go very well. We've had alota rain and come with about half a corn crop and half a bean crop. The cattle I fed this year came in about the poorest I've ever fed. Took a long time to get 'em to market. So there's been financial stress and there's been some problems that have been ongoing that haven't had a resolution. I've had some problems with my major landlord which is one of the reasons I'm havin' trouble with FHA. On my mind every day. You can't ignore problems like that. It not only affects today but it affects tomorrow. I

worry about it to a point. It's not a compulsion where it totally occupies me, but sometime during the day, I wonder what you can do to solve your problems. It's not a great depressing force, but it's not an upper either. It's not overwhelming. It's there. It's counter balanced too by the good things. Everything that happens isn't bad. And I think I've got a sense of destiny where no matter how bad it gets, an' it never gets as bad as you can imagine it. It never materializes that bad. But a sense of destiny where I know that everything is gonna' work out. An whatever does, is gonna be alright. I think there was one year I was farmin' where I made money. An' the last normal year for weather was the year before I started farming. My own personal failures you know. If I was a good farmer, I wouldn't have any of these problems. You know, we make our own problems. An' if I was smarter and worked harder'n...I try to figure out how to change my environment to make me successful. You can only dwell on it so long and then you better get off'n it. Then you better think about somethin' else. If I'm preparing for a hearing or writing a letter, why I try to think of what I should be saying and how to word it. When ya think about your own problems, it turns to daydreaming, and then its time to think about somethin' else. Self pity is not helpful in any way. It's disgusting. And I don't engage in that. I'm fortunate that I haven't had any marital stress. Sometimes

there's problems keeping the children solvent, but things usually work out and get better after while. I think everyone struggles in life. I can always look around and see people that have had it a whole lot worse than I've had it.

When I get to the point where it gets to be depressing, I usually look to the Bible for help. I have usually read a verse that will come to mind. An' I'll think on that and try to conform my mind to that. I think what have I got for hobbies. I love to fish, but I've only fished about twice this summer. I don't call that a very good hobby. If I do have a hobby, I think it's Bible study. I do that every day, and enjoy it and it's something I really like to do. It helps you keep things in perspective and to keep a right attitude. There's good things that happen all the time. If you only see the one side you've missed it. I can take a three block walk at night and don't have to worry about bein' mugged. We live in a really safe environment. I've got three healthy vigorous grandchildren. My sons are happily married. My wife supports me. But she does a good job. In fifty years you should be in control of your body, mind, and spirit. Stress has been pretty consistent this year. I don't really think it's affected the quality of life that much. It's an ongoing problem, but everybody in poverty suffers. And there's so many people worse off than I am.

Analysis of Control Group Interview #1

This case study reflects responses to overwhelming financial difficulties. The weather has been a contributing factor to stress. His hobby, fishing, has been impossible due to the constant rain. In spite of this stress, a stoic, positive response to life persists. Bible reading has been a positive influence in dealing with the stress, along with an attitude of thankfulness and awareness of blessings of family. Bible reading is done regularly every day. Residing in a safe environment is mentioned as an anti-stress factor. He is aware of the stress as well as aware of when he is thinking about it too much. He mentions being in control of mind, body, and spirit. Corrective action is taken daily to relieve the stress. Holmes and Rahe score: 31.

Control Group Interview #2

Well, I would say that life has been real good. We haven't had any financial problems. We enjoyed vacationing. We just a really haven't had any problems except for a death in the family, a sister-in-law. Otherwise, between my wife and me, everything is great and well, I guess the Lord has really blessed me. Faith in the Lord is where you really draw your strength. Knowing that any problems that a person might have in life are just very temporary, that they just don't last very

long. That's really where you get your support and your joy from, is the things that happen here on earth are just temporary. They don't last. Eternal life is gonna be great. I'm looking forward to that. I'm ready to go anytime. We attend church every Sunday. The question never comes up are we going to attend. It's just taken for granted that Sunday morning comes and we attend.

I get up half an hour earlier every morning. That's my quiet time. I read the Bible. I've gone through a stressful period. I lost both my legs in a farm accident about nineteen years ago, and course I'll admit I probably didn't accept it as much for awhile as I probably could. But God kept sustaining me and strengthening me and I've really accepted it now. I had a' leave something I was really enjoying and liked. It was really a stressful time then.

We play alot bridge. My wife likes ta play, and I us 'ta do some woodworking, but I've gotten into the shoe repair business. I try to read and I'm not a real good reader therefore I don't probably read as much as I could or should. We have lot's a' blessings. Lot's a' blessings.

Analysis of Control Group Interveiw #2

This case study reflects a person who has had stress from the loss of both legs, yet states has no stress now. He credits God with helping him and reads the Bible regularly. He

mentions blessings and appears very positive. He is not afraid of death and states he is looking forward to eternal life. He plays bridge with his wife and enjoys that. Holmes and Rahe score: 17.

Control Group Interview #3

Well, I guess the answer to that would be the stress of mine hasn't changed a good deal, however, the stress around me living in a farming community, you get the feeling of other people being stressed more than myself. My business is quite steady. The biggest stress I get is the stress of other people because its a farming community. People will come in and they'll visit. I can respond to it, but we forget the good times and kinda remember the bad times. It doesn't personally bother me. I feel bad that they're in this situation. However, next year it may not be the farmer that's in this situation. It may be the factory worker. A few years ago, my wife worked for a company that closed. To me, that's alot more stressful than this is. However, you cope with it and go on. It's a different stress than what hits you personally. My wife and I both work. She brings homes problems from work. But she's in a job that is quite stressful. And so she hears alota problems from people and you know, trys to deal with it. But as far as being stressful to our own selves, it doesn't really get us down.

Finance is the first stress that anyone feels. We certainly

have to have it in the society we live in. But this year for us, we have our outlets. I do woodworking and play golf. I don't think about it around the clock. When the whole community gets hit, there's no question, it affects everybody. It doesn't bother my sleeping. Most of the concerns are things you can't control. So therefore, you hafta' make the best of the situation. You hafta' hope that next month or year it will be better. You can't forget it, but you certainly don't want it to control you. You hafta' control it.

We attend church quite regularly. We do alot of those things. My wife and I have always been real communicative with each other. We may not always agree, but we always talk with one another. I think you need ta talk to people. Reality is here. It may not be here tomorrow. It's gotta be dealt with. You have to face it right up front. Yeah, it's been a good year. No matter how good it is, you always want it better, but I'm real pleased with it.

Analysis of Control Group Interview #3

Findings from this case study reveal stress which is not personal, yet there is an acute awareness of the stress present in the community. This stress affects him but is not internalized. He reduces or prevents stress by talking about it to other people. He reflects positively on a good year. Holmes and Rahe score: No items checked.

Contol Group Interview #4

Since my retirement, I just love it. I been busy and almost need to hire help to keep up with the things I wanted to do. I'm glad I'm not workin' there anymore, cause I hear they're havin' more problems all the time. I was never ever bothered much, but ya hear it from everybody else that stops by. I look forward to every day and hope there's alot more days. I couldn't wait until I did retire. At the tail end it was gettin' hard to go to work every day.

We've had a tremendous amount of funerals with friends and you don't have to worry bout takin' time off to go to those things you'd like to attend. Been a good year. Good year. We like to go fishing and camping. I'm real anxious to go camping. 'course this past year we haven't been able to do any camping due to the park's being closed. And when its rainin' all the time, you don't really desire to get ready to go. We love Blue Grass festivals and which we haven't been able to go because of the weather. We just cancel that year.

I get up and clean up every day and get the dog and then go from there. I usually eat only one meal a day. There's only stress from my mother. She flies off the handle if you say anything to her and my sister doesn't help matters any cause she says she's doin pretty good for 85 years old. I just want to leave because I can't stand the smell. I've told her, but the

furniture absorbs it. It kinda bothers me that my nieces have never been to visit us. She just says you live your life and I'll live mine.

Analysis of Control Group Interview #4

Findings from this case study reflect enjoyment of retirement and appreciation for life. The fishing, camping, and Blue Grass festivals which have been hobbies and sources of enjoyment have been canceled this year due to the rain. Frustration in dealing with an elderly parent is reflected with need for more community health and nursing services. Generational value differences may be a problem. Holmes and Rahe score: 97.

Control Group Interview #5

Life's been good. It's been runnin 'bout normal. I can't say it's been stressful or unstressful or it's stress right now. It's been a good year. Our grandson's been over alot 'n we enjoy having him over. Our kids, one's got his master's and one's a finishing up school next year. Our daughter graduated and our other daughter's in second year a' nursing. We bought a house. And I enjoy doin' carpenter work. I golf in the summertime and play a round. I can play pretty easy. I am easy goin' as can be. Takes an awful awful lot to get me upset. Our philosophy is that today is a good day and you better just say every day is a good day. I'm not what you'd call religious.

I just feel that I'm up. I'm alive. I've got family, my wife, my kids, my grandkids. I've got places to go, things to do 'n if I wanna go the the country club and play a little golf and eat a steak, I do it. And if I wanna go to Iowa City to watch a little league game, we do it. If we wanna go to watch a girl's softball game, we just do it. I call my wife in the middle of the afternoon and ask if she wants ta go, and so away we go.

I quit smokin' and watch my cholesterol and try to get exercise. If I have stress, I don't recognize it. I probably have stress, but if I lay my head down on the pillow, I go to sleep. If a train runs through the bedroom, I don't hear it till I wake up in the morning. I like to get up early, just kinda dink around, take my slow shower, take a slow breakfast, and watch tv and then go to work. It takes me an hour to get ready in the morning. I get to work a half hour early before we're supposta' start, and get the coffee made. I'm probably not an organized person if you'd talk to my wife. But I get it done. If I don't get it done today, I'll get it done tomorrow. But I will get it done. Grandma lived to be 90 and grandpa lived to be 92. My Dad died at 62. He just, he'd had cancer and well, his heart and I think cancer treatment got him.

Analysis of Control Group Interview #5

Findings from this study show a person who denies stress. He states that he is easy going, unhurried, and enjoys

activities with his wife. Longevity in grandparents is mentioned, although his father died at age 62. He is aware of diet, exercise, and cholesterol. He does not worry. He also has not experienced financial difficulties or overwhelming stressful life events. Holmes and Rahe score: no items checked.

Control Group Interview #6

Life's really been good. There's really been no problems. Its really been neither uphill nor downhill. It's just normal. I can't think of any changes or anything. Nothing big. Nothing little. Nah, I don't have any problems, no worries that I know of. Life seems to be good. I'm not rich. Certainly not good looking, but what the hell, ya know that's...but I'm not worried 'bout anything. I wouldn't want that ta change. About five years ago, I quit drinking. That seemed to take alota problems away from our home. I go to the VA hospital 'bout once every month. Things down there have turned out good. The problem I had was an irregular heart beat and high blood pressure, but they got that under control, so ah, I don't know there's been any stress over anything. I get a little worked up over politicians, but they're always gonna be here.

When I have had stress in my life, I just sit down and relax and keep my mind off'n it. Be as positive as ya can be. Some things ya can't do anything about, so ya just roll with the punches. Ah, I'm not a religious person. I was in the military

30 years ago. I don't believe it changed my life. If you knew my parents, why there wasn't really much of a change, leavin' home 'n entering the service. Yeah, it was the same. There was discipline.

I've had problems in the past, but this last year I can't think of anything that was life shattering. A year and a half ago, we had some problems with our daughter. Ah, she's an alcoholic and in'ta drugs, and everything else. An we got custody of our grandson, and that's been a joy more than anything. It hasn't really been a stressful situation, cause he's a good little kid. And he's fun to have around. Keeps grandma occupied all the time. I don't even know where my daughter's at. I don't think she'll ever straighten out and I've known for several years that she's had problems and she doesn't wanna help herself. If that's the lifestyle she chooses to live, then that's the way it is. Just don't bother me with it. Keeping this child is not a burden or a stress. Before we had a chance to get him, he'd been in a foster home for ten months. And that was not a good thing. But he settled down. Its security. He comes home from school, and he knows there's somebody there. He knows he's going to get something to eat. And he knows there's going to be somebody there when he wakes up and he knows we care, so you know, it's been good for all of us. He keeps grandpa young. You have to turn the negatives into

positives. Ya have to. Ya can't live with that stuff forever. It'll drive ya crazy, but so ya just roll with the punches. My daughter, that's something she's just gonna have to live with. That's her choice. We tried. We had her committed. She ran away from that so the alcohol and drugs must be more important to her than her family. But if it's that important to her, we can't do any more than that. There's nothing else more we can do to help her. So she's gonna have to learn to live with it. She's just gonna have to someday reach that point where it gets so low that she has nothing else to do, noway to go but up, and then she can find it out. She'll find out, you know if she just lives that long.

My parents were farmers, certainly not rich by any standard, but we never went hungry, work hard, an yeah, you either toed the mark or Mom said, look here little guy and we're gonna have a talk and I don't like them talks. Even at age 51, I don't like them talks. An she always seems like I'm a little guy. She'll always say, hey we gotta talk about this (lots of laughter). Well, she's had alota problems, and it never got her down. Dad died at a very early age. He died at 58 and she was only 49 and she struggled on upwards. He died of a heart attack. Stress is just not a big thing around our place. **The** only time is if I get worked up over Clinton or Bush or...(laughs).

Analysis of Control Group Interview #6

Findings from this study show a happy, upbeat person who has been through the stress of having an alcoholic daughter. He says he has turned the negatives into positives. He derives joy from his grandson. He has resolved the situation with his daughter by taking positive action and then letting go. Concern is present along with hope for her recovery, but he has let go of the problem. Ancestors and military were strong influences in his life. He reflects having gone through support groups such as alcohol anonymous. Coping ability seems strong. He has taken positive action and released worry. Holmes and Rahe score: 17.

Control Group Case Study #7

Life is better a little bit maybe than usual. I turned 70 years old, so my income isn't restricted so much as it was before. And then, otherwise, life is pretty much in general. My wife and I had some minor medical problems, but nothin' major. We got along just fine. Just alota work. We're much, much busier. I've worked 26 years and I just work 7 days a week and never get caught up, but there's just people all the time wantin' jobs figured. And that, I'm just always behind, always behind. It bothers me alot more now than it used to. I used to just walk away and forget it, but it bothers me a little more now. I wake up in the middle of the night, and think,

well, I'm gonna try ta get this guy's figured up and done up tomorrow so he'll get off my ear. Worrying more than I was before. Just the fact that we're just alot busier than we have been. Gone ten years of pretty easy goin' and then I don't have an office girl full time which I always had before. I have more work to do in the line of drafting and estimating.

It's been an excellent year for us. My wife had a little surgery here a few days ago. She had a malignancy on her nose and a course this caused her alota problems. It seems to be doin' real well, but she's not quite as easy goin' as I am. And she's worried alot. I just kinda look at it as a minor thing.

My dad was a very outgoing, easy to get along with, everybody liked person. Real easy goin'. I'm sure I inherited alota that from my father. My mother was much more disciplined. My dad says he come up from Missouri in 1914 with nothin and had over half of it left. This was the type of person he was on so many things. And in turn I've inherited alota these sayings and lookin' at things like they are 'n so I think it's great. My mother is now 95 years old, and healthy as a bear and just doin' great. Sharp as a tack yet. I lost a brother at 65, who's a doctor, and my sister at 62, who's a nurse. And I'm the only one left yet for Mom. A'n I'm not doin' anything right. I'm not walkin' and I'm not eating right or doin' anything I'm supposed to be doin', but I'm healthy. I

just don't have any problems (appears much overweight). I don't smoke, never smoked. Yeah, I don't do anything right that I should. Basically, I don't fret too much about it. I always said, there's too many important things to worry about. My wife feels things are really important, like we had a sewer back up and found out the people that put in the new water lines had broke out system, an she just, I thought the world was gonna collapse. An ya know what, tomorrow mornin', the sun comes up, we call some one to come down an fix it, and there's all there is to it. By yesterday noon, it's fixed and everything's fine. But she worried all this night. In the middle of the night, she'd wake up an I hope they can find out what the problem is. But I slept. And I said in the mornin well, I'm gonna get it fixed.

We're a musical family. And I love music. I presume that my wife probably has 1200 musical tapes (a video tape is presently playing). The things I pick up, she likes 'em, and I dub 'em from one to the other, take 'em home to her and everyday she sends down tapes for me to tape for her. And music is, I think, a great relaxer. We'll listen for two hours, the two of us. For us, its real relaxin'. I'd say this probably helps her as much as anything. At night, she'll always tape and day and night. If you come in at midnight tonight and we're both asleep, there'll be music going, the real quiet slow music. An

then every other Friday night, the Broomfactory, they have the Sugar Daddy's jazz band. And we're great followers of theirs, so every other Friday, we have this little break. We go out to eat and go over there an' listen to the music.

I'm a believer in religion, but I don't follow religion. My mother's very strict and she wouldn't think of goin' through a month of not payin' her tithe, and she attributes this to her longevity, that she's doin the right things for God. But I'm not a strict follower of religion at all. My wife itsn't either. We're too selfish to do the things we should be doin'. We like to live our own lives.

I was in World War II and I always said and I hear so many people say, if I just knew I was sixteen, eighteen, twenty, twenty two years old, and just knew what I know today, I'd sure live life different. I knew I's livin' a great life. I enjoyed it. I loved my life. I went overseas to the Phillipines. I had a great time. When I developed encephalitis and they had to send me back to the states, I hated it cause I was havin a great time in the Phillipines. I'm happy here too. It didn't make any difference where I's at.

Analysis of Control Group Interview #7

Findings from this case study reveal a contented and happy person, although job related stress has increased some. He seems very concerned about his wife and her happiness.

Their reactions to stress are contrasted by him. He credits his positive reactions to life to the easy going lifestyle and sayings of his father. Music which is played night and day in their home is recognized as a great relaxer. They do things which they enjoy together as a couple. Although he states he doesn't do anything right regarding risk factors, he addresses stress in his life. Holmes and Rahe score: no items checked.

Control Group Case Study #8

Well, ya got worries. Each day has it's own. You have to be an optimist. This year hasn't been any worse than the rest of 'em. You work hard, go to sleep, get up and there's a job ahead of you and you ain't got time to worry 'bout it. Just get up and do 'em. You pay close attention to the weather, watch the market, watch the livestock. It's optimistic. You always think things will be better or that you'll have better markets. You look forward to goin' fishin' or flying or being with friends. I don't dwell on it. You have so many things to do, you just do things different. Fella has a stong faith in God. It helps. Have a good relationship with my wife. I have a strong family background.

Being in the service gives you a different perspective, equality. In the service, everyone was judged equal. If you belonged to a certain social group or a certain family, you have more rights depending on who you are. In the service,

everyone's equal. It's not socialism. It's equality on the job. You're judged on your ability. We've had poor crops this year and that won't be financially noticed until 1994. So it'll get worse. You don't dwell on it, but ya know ya owe alota' money. My heart, I'm in atrial fib.

Analysis of Control Group #8

Findings from this study reflect considerable financial stress although he remains optimistic and doesn't dwell on it. Faith in God and family strength is expressed. Being in the service gave a sense of fairness and equality which may be contrasted to hard work for little pay in civilian life. Concern for a potential health problem is present. Holmes and Rahe score: 122.

Control Group Interview #9

Business has been slow. Sales has been slow. Other than that, it's been pretty much normal. I'd like ta see retail pick up, but then everyone else would too, ya know. The rain, and the weather and everything we've had this year has been a little stressful. But we're adjusting to it. It's about the same. it just seems like we're tireder at night when we get home. When we get home at night, it just seems like we're too wore out to go any further. You just don't go out and socialize. You wonder what the economy is gonna do and what's gonna be around tomorrow and stuff. I do sleep at night though. When

the week end comes around, I just do the little odds and ends that you been puttin' off and by the time you get done with that, why then the week end's shot and you're tired. Income-wise, it seems like you're puttin' in more hours without any more take home pay. But as far as bank account goes, everything keeps goin' up. Other than that, we're gettin' along I guess. Just try'in to cope with it.

We like to go see the grandkids or go out for a quiet ride on Sunday afternoon. Just get away from it all. Otherwise it's just the same complaints year around. We've never had to go through the depression like our parents did. I think the majority of the people my age today couldn't hack it if they had to go through it. They wouldn't know how to do the basic stuff to make a livin'. I don't get exercise. We've tried, but it's back to the same old rut. They told me four years ago that my cholesterol was high and I had to go on a special diet. It's remained the same. The doctor said I just think you're one of those people who just naturally have a high cholesterol and your body will tolerate it, so don't worry about it. I don't smoke. My wife does. Same old grind. Same old routine. You always keep hopin' things are gonna improve. Next year, we'll have the morgage paid off on the business. Maybe then we can put away a little more in the bank. Also, retirement, you'd like to put away more and help the grandkids more. It's a constant

struggle. We're involved more in the church more than we used to be. It takes quite a little time and it's rewarding.

Analysis of Control Group Interview #9

Findings from this study reflect stress caused from economic difficulties. More work and less pay are noted. Satisfaction with life is lessened as he is too tired to socialize. Resources to address problems and potential problems are needed. Holmes and Rahe score: No items checked.

Control Group Interview #10

Well, it was in a hurry all year. It was just a headache all year. Well, if we don't keep our sense a' humor, we just aren't gonna keep 'goin. That's all there is to it. And we got a real low income this year like every farmer in the state of Iowa. I am lucky. I took out Federal Crop and disaster is gonna pay quite a little I guess. The financial is the big problem. Traded boats this spring. Used it two hours all year. You might say vacation time didn't amount to anything. It's been a good year though. Everybody stayed healthy. Nobody got hurt. It'll be better next year. It's got to. I think if it gets worse, I'll go work in some factory. People in town, eight to five, no upkeep and no expense. My wife works. She makes mor'n I do working in town. I just won't be able to spend as much. I do all my own welding and everything if I can. I invent. Things are just gonna be tight this winter. Dad always said a day's

work is a day's work. If you don't do nothin', you don't get paid. I think parents is what keeps you goin'. Lot'a things today, you think back, yeah, that's the way Dad was doin'. Two thirds of this world is under water, and that's what we should do is go fishin'. I like ta take all four of the boys and go to the Mississippi. This year, we didn't take time to do that.

My wife's interests have kinda' changed a little bit since she started workin' in town. She talks more about that than this. I don't know what she's talkin' about. When I started farmin' in '62 and we had 180 acres rented, we lived real well. Now I'm farming 500 and all four of the boys are workin'. And she works. Two of the boys moved out. But ten years ago, you could buy a box of breakfast food, it cost thirty cents. Now it's three dollars. You got 150 bushel corn, you get a dollar. So what's the heck's the difference? We go to the store and we gotta pay what's ask. We take our grain to town and we gotta take what they give us. We're gettin' the same price for corn as we did then. But everything else has gone up. It isn't gonna be a big crop. I work more when I'm under stress. I sleep well. Get plenty of exercise. I carried a calf in here this mornin'. It's layin' in the other room. I hope he comes to. Born out in the snow last night and I can't get him warmed up (healthy looking calf is lying on a throw rug in the living room

with it's eyes rolled back and neck hyperextended and unresponsive).

Analysis of Control Group Interview #10

Findings from this study reflect efforts to deal with poverty. Optimism is reflected along with concern. Contrast between wife's work in town and his work has affected communication between them. Fishing has not been done this year because of weather problems with rain. Remembered comments from his father sustain him. He mentioned parental values which reflected coping. Sense of humor was mentioned along with philosophies of life that were sustaining. Holmes and Rahe score: 20.

Summary

Subjects who suffered an MI showed chronic stress followed by a period of no stress, then another major stress followed shortly by MI. Often the time factor between the last stressor and MI was short, ranging from 5 hours to one or two weeks. Subjects felt isolated and alone in dealing with the stress and seldom referred to spiritual values. Self talk was negative and urgent with hurry and time deadlines. Insomnia, weakness and fatigue were expressed along with lack of control over life events. Elimination of social activities often preceded MI. Financial stress and the stress of dealing with substance abuse among family members frequently preceded MI.

Premonitions of impending MI were present. Men who had been through cardiac rehabilitation were insightful and reflective of their experiences. Some expressed the helpfulness of talking with the nurse researcher and stated that they had developed self insight through this experience.

The control group placed more value on spirituality than the study group did. In one case, music which was played throughout the house 24 hours a day provided soothing relief from stress. Weather was more of a problem for the control group probably because of their rural environment. The primarily rural setting of the control group reflected financial and weather stressors, but inner resources appeared stronger. Faith in God and daily Bible reading were more common in the control group. There was more of an inner peace expressed in the control group, either from life philosophies stemming from family and ancestry or general philosophies of life.

CHAPTER FIVE

Discussion of Findings

The findings of the study sample will be discussed followed by discussion of findings of the control group. There seemed to be a pattern of chronic stress, followed by no stress or greatly lessened stress and then a large stress or group of stressors which lead to an MI within a short time, in some instances one or two weeks. For example, one person experienced MI one week following a completely stress free three week vacation. Another experienced MI five hours after arriving in Florida for vacation. One person stated that "things had planed out" just before experiencing another stress and his MI. After experiencing chronic stress, another noted skiing in the mountains was fun. Then several stresses appeared followed by MI.

Most felt that they were alone in bearing the burden of their stress. In some cases family members expected the person to deal with the problem and left them with the responsibility. In other cases isolation in the work environment and circumstances left the person with the burden and responsibility. Some noted wife's dependence as being an additional stress and wished their wives were able to deal with stress more independently. One chose to confide in

no one outside the family concerning the stresses, yet confiding with family was listed as a stress in itself. This subject recognized the family's inability to cope with the situation. This finding has implications for family teaching and support for wives which may be developed into primary prevention.

Self talk consisted of hurry, time deadlines, pressure, and worry. One person experiencing MI listed the time pressure deadlines as the only stress along with eliminating some of the good family and fun times. Many expressed worry about getting older. Deaths of fathers and sibling brothers were especially disturbing, particularly as the person approached that age.

Most subjects mentioned insomnia as a symptom. This may be related to increased adrenalin levels in the body and may warrant more serious consideration as a preventive alert. These examples raise questions of whether differing adrenalin levels or cessation of adrenalin levels may play a part in MI. Would depletion of adrenalin in the body lead to MI? If this is the case, measurements of this level may assist in prevention.

Possible pre-warning signs listed include feelings of weakness, asthma, shingles, elevated blood pressure, feeling tired and edgy, increased smoking or drinking, short temper, irritability, and vomiting. More emphasis on these symptoms

and their identification by nurses may be needed for early prevention interventions. Insight seemed to come during or following the MI, which may be viewed as a time for introspection and insight. Therapeutic nursing communication is needed at this time. Nursing intervention would be beneficial in detection of early symptoms and institution of therapeutic communication. MI could be better understood or averted.

Socio-economic conditions, education and health are interrelated. Financial worries were listed as a common stressor. Many took on second jobs and additional workloads in order to make ends meet. One person mentioned that this provided the surprise benefit of sleeping at night since he was so tired. One person took pride in not seeing a doctor in spite of vomiting 4-5 times a day. One person was put on a muscle relaxant preceeding the MI. The relationship of medication to MI may be significant. Most expressed the fact that they still are stressed although to a somewhat lesser degree leading to the conclusion that follow-up counseling for stres may be helpful.

Most complained of weakness or other symptoms preceeding the MI. There seemed to be a premonition present. Some had consulted the physician. Some went for regular check ups and were told nothing was wrong. One person even

went to the library to investigate by-pass surgery. One person showered, shaved, and arrived at the ER entrance "just to stop by." He suffered an MI a few minutes later in the ER. One person took out Blue Cross and Blue Shield because he was concerned that by-pass wasn't covered by his insurance. An element of denial may be present here also. Responses from physicians ranged from "it would have happened anyway" to "did you attend Alanon?"

Several had military experience and voiced the contrast between the discipline, order, economic security, and fairness in the military workplace and the present working situation. Many contrasted the value differences between what they believed and the way they were raised with what they believed were the present generation's lack of morality and values. This was a major stress for them. Some expressed anger at God at the time of the stress and MI. Some expressed insight into God's intentions for their life. Some expressed a conflict with childhood religious values and present values. One expressed guilt.

One person talked about feeling indestructable and lived that way. Another talked about many near death experiences throughout life. One related that only the small things bother him. One related that talking to the researcher was helpful.

The need for personal one-on-one counseling by a qualified nurse may be helpful.

Financial stress seemed to be the major stressor with both groups, along with social problems with drugs and alcohol involving children and families. The control group reflected financial stress and stress related to family members being involved with drugs and alcohol. Small town businesses were affected by depressed farm economy. Even though control subjects were not directly affected in some instances, stress was present due to residing in the area. Two subjects in the control group expressed no stress. They were optimistic, did not worry, and took time for activities which they enjoyed. Bible reading and faith in God were resources used to deal with stress.

The long rainy period during the summer contributed to an inability to enjoy usual relaxing hobbies and activities. Overwhelming environmental natural disasters may override coping strategies. Personal strategies used for coping may not be effective in periods of natural disaster and environmental crises.

Religious strengths seemed more prevalent in the control group. Philosophies of life derived from parents and ancestors gave strength to both groups. Sense of humor and enjoyment of music were coping mechanisms .

The control group seemed to reflect more on inner strengths and to recognize when stress was overwhelming. They then made a choice to think about something pleasant. Several in the control group related feeling too tired for socializing. Mental stress seemed to play a more important part in MI than any of the other risk factors.

The Holmes and Rahe scale proved to be of controversial value. Some subjects did not check anything, yet had major stresses followed by MI. In the study group, four out of ten subjects did not check any stresses. In the control group, four out of the ten subjects also checked nothing for stress. Filling out a form seemed to be more of a nuisance and waste of time to the person coming in eager to talk.

Subjects approached the interview with an incredible need to talk and receive understanding. Filling out a form interrupted the communication interchange. Only one totaled a score which placed that person in the 200-299 range listed as moderate life crisis. Only one totaled a score in the 151-199 range listed as mild life crisis. The remaining scores ranged from 0-150 which is associated with no significant problem. Several did not check any stresses. In the control group, no score reached over 150, placing that group in the no significant problem category.

Implications for Advanced Nursing Practice

This study is important to nursing because the lives of people who had experienced MI were illuminated. The people themselves identified stresses which included feelings of isolation, negative and urgent self talk, insomnia, financial worries, fatigue, and the chaos of life. Nurses, because of their broad scope of practice, are a living resource available to address client concerns at all levels of health care. Cardiac nurses need to apply unique and individualized care to persons and their families. Nursing intervention for stress should be initiated in primary care settings identifying insomnia, physical symptoms, feelings of weakness, premonitions, and negative self-talk. Teaching should be initiated identifying behavioral cues and coping strategies. Support groups, relaxation methods, guided imagery, meditation, and spiritual awakening could take place. Families could be included. Interviews with advanced practice nurses could be a routine part of primary care for families of cardiac clients.

Nursing support groups and preventive programs conducted in homes, schools, communities, and workplaces could assist people to develop self-care techniques and strategies such as relaxation, stress management, and how to

address troubling emotions and relationships. Patient advocate nurses could assist people in obtaining current information and answers, empowering them to make informed decisions about their own health. The nurse as a living resource should be utilized in community wide stress reduction programs.

Nurse educators need to be informed about the person as a whole in order to totally address client issues. Students of nursing must be informed in order to provide holistic nursing care. Interaction with a nurse influences self understanding and promotes self understanding and provides opportunity for humans to control their own physical health. Nurse educators can be the catalyst to conduct and translate nursing care research to clinical practice.

Research by nurses can add new humanistic dimensions to unique individualized health care, assisting people to understand and heal themselves. Nursing centers can serve as laboratories to explore and instigate research, thus reaching community settings such as schools, Phase III cardiac rehab, and the workplace. Nurses can assist in restoring that balance where person is at the center with environment and health in proper perspective. Persons can then be empowered to make healthy lifetime choices. Affordable health care can be attained.

Recommendations for Further Research

The relationship between adrenalin and MI needs further development. The relationship between chronic stress, and then major overwhelming stress which then precipitates MI within one or two weeks should be examined. Studies should be developed to test the hypothesis that after adapting to chronic stress, there may be a large decrease in adrenalin or other factors caused from a period of no stress immediately preceeding MI. Qualitative methodologies should be used to understand the unique experience of stress and its meaning.

This study should be repeated using female subjects and compared to the male experience of stress perception before MI. Further, it would be interesting to study the stress experiences and the relationship of MI of persons serving in the military with those of persons in civilian life. Other studies could compare the effects of intergenerational religious and moral value conflicts and the perception of stress.

Intuitive feelings of persons should be given more importance and investigated further. Premonitions of impending MI were prevelant although little attention was given to their presence. Research could compare stress and MI incidence of persons who have experienced nursing care that included stress counseling and teaching.

Summary

In order to explore the lived experience of stress in men between the ages of 50-70 who have experienced an MI, a qualitative case study design was employed. Ten one-hour taped interviews were conducted with an MI survivor. Data were collected to illuminate what the lived experience was like in the year preceding MI. Analysis took place according to Denzin's (1989) interpretive process. A control group consisting of ten men ages 50-70 who stated that they were healthy was interviewed and the data analyzed.

Deconstruction, capture, bracketing, construction, and contextualizing brought into sharper focus the phenomenon under investigation. The goal of these interpretive activities was to create a body of materials that would furnish the foundations for interpretation and understanding. The insights are those of the researcher. Holmes and Rahe scale measurements were of questionable value and significance and did not reflect stress as perceived by the person or degree of stress. This study increased the understanding of stress in the everyday life of men who had experienced MI and provided rich information for the development of advanced nursing practice interventions, nursing education, and nursing research.

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APPENDIX A
CONSENT FORMS

To be completed by the Investigator:

Date Submitted: May 17, 1993

Proposal Title: The Meaning of Stress in Men Who Have Sustained a Myocardial Infarction

Investigator: Belva Krukow

Faculty research advisor (for student research): Dr. Barbara Haas Marion Hemstrom

Return to: Belva Krukow

Name

Nursing

2127 210th Street

Street Address or Campus Office

Hampton, Iowa 50441

City, State, Zip if off campus

To be completed by the Human Subjects Research Review Committee Chairperson:

Date Received: 5/21

Decision:

- ☐ Approval, no risk
- ☒ Approval, minimal risk
- ☐ Approval, subjects at risk, but benefits outweigh risks
- ☐ No approval. Subjects at risk or proposal does not adequately address risks, benefits and procedures.

Reasons for Disapproval: _____

Suggested Changes: _____

Human Subjects Review Committee Chair: Steven F. Faux

(1992-1993)

Date: 7/1/93

Approval based upon revisions
to Consent form.

2101 Pleasant Street, Des Moines, Iowa 50309, (515) 241-6212



IOWA METHODIST HEALTH SYSTEM

September 16, 1993

Belva Krukow, R.N.
RR#3, Box 28
Hampton, Iowa 50441

Dear Ms. Krukow:

Your research proposal entitled "The Meaning of Stress in Men Who Have Sustained a Myocardial Infarction" was reviewed by the Iowa Methodist Research and Innovation Advisory Committee on Sept. 15, 1993. This committee is charged with the responsibility of reviewing research conducted at Iowa Methodist Medical Center or involving patients from that institution and to approve the procedures and forms used to protect the rights and privacy of human subjects involved in research projects.

The committee was interested in knowing how the consistency, reliability, and validity of the results would be obtained from the interview that you propose to conduct. They would also be interested in receiving a copy of the instrument referred to as appearing in Appendix B (not included in the copy submitted to Iowa Methodist).

Approval was given to conduct the study at IMMC and to use the proposed consent form. It is suggested that the consent form include a phone number or address where the subjects can contact you if they have questions later or wish to withdraw. Your project and approval will be filed as 18-094-532, BK:STRESSMI.

Best wishes on the conduct of your study. If this office can be of any assistance, please contact us. We look forward to receiving a copy of the final report of this project.

Sincerely,

Keith L. McRoberts, Ph.D., P.E.
Director, Research and Innovation Center

cc: Susan Larson

Belva Krukow
RR#3, Box 28
Hampton, Iowa 50441
July 30, 1993

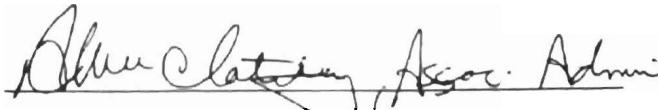
Iowa Heart Center
1200 Pleasant Street
IMMC
Des Moines Iowa

Physicians of IHC:

I am seeking permission to access your patients for my thesis as a qualitative research project through Drake University. The population will be ten men between the ages of 50-70 who have had a MI within the year and who identify stress as a risk factor, and who have been referred to cardiac phase II rehab. The study will involve a taped interview and access to the hospital medical record. I would like to begin this study the first part of August. Please contact me if there are any questions. Thank you very much.

Sincerely,


Belva Krukow


Signature IHC Physicians Group

Belva Krukow
RR#3, Box 28
Hampton, Iowa 50441
August 3, 1993

Mid Iowa Heart Institute
1200 Pleasant Street
IMMC
Des Moines, Iowa

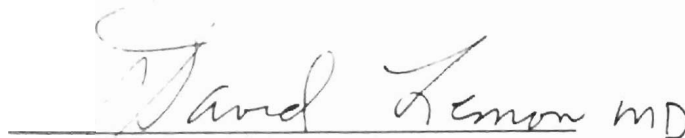
Physicians of MIHI:

I am seeking permission to access your patients for my thesis as a qualitative research project through Drake University. The population will be ten men between the ages of 50-70 who have had a MI within the year and who identify stress as a risk factor, and who have been referred to cardiac phase II rehab. The study will involve a taped interview and access to the hospital medical record. I would like to begin this study the first part of August. Please contact me if there are any questions. Thank you very much.

Sincerely,



Belva Krukow



Signature MIHI Physicians Group

Drake University

Consent to Participate in Study

Information Regarding Study

The purpose of this study is to examine the meaning of stress as it is experienced in the everyday life of men who have experienced a myocardial infarction during the past year.

Participation is Voluntary

You will be asked to share your feelings of what the everyday lived experience was like for you this year. It is your decision as to whether or not you wish to participate. Your identity will remain confidential. Conversations will be taped, kept on file, and destroyed at completion of the study. Although verbal responses may be used in reporting, no name will be used with responses. **Feel free to ask any questions you wish** or to withdraw from participation in the study at any time.

Consent to Participate

I HEREBY CONSENT to be interviewed by Belva Krukow, R.N. I have been informed this study has been undertaken to understand the meaning of stress in men who have experienced an MI within the year. I have been assured that my identity will remain confidential and I have asked and have had answered any questions I have regarding the study.

Researcher: _____ Date _____

Belva Krukow
Box 28, 2127 210th St.
Hampton, IA. 50441
Phone: 515-456-3863

Signature _____

Date _____

DRAKE UNIVERSITY
DIVISION OF NURSING

FORMALIZATION OF DATE OF THESIS DEFENSE

I recommend approval of the date of thesis defense for:

Delia Kunkin

Student

~~The meaning of Stress in people who have just survived a~~
myocardial Infarction

Title of Thesis

7-20-94

Date of thesis defense

Maxim Heaston

4-15-94

Thesis Advisor

Date _____

Dean of the College of Pharmacy and Health Sciences Date

APPENDIX B

HOLMES & RAHE TOOL

Life Stress Scale

This widely reprinted index lists 43 stressful life events and the value of each in stress units. These are both positive and negative events. Check mark the events that have happened in your life within the last six months.

Life Event-Assigned Value

- __Death of Spouse-10
- __Divorce-73
- __Marital Separation-65
- __Jail Term-63
- __Death of close Family Member-63
- __Personal Injury or illness-53
- __Marriage-50
- __Fired from Work-47
- __Marital Reconciliation-45
- __Retirement-45
- __Change in Health of Family Member-44
- __Pregnancy-40
- __Sex Difficulties-39
- __Gain of New Family Member-39
- __Business Readjustment-39
- __Change in Financial State-38
- __Death of Close Friend-37
- __Change in Number of Arguments
With Spouse-35
- __Mortgage over \$40,000-35
- __Foreclosure of Loan or Mortgage-30
- __Son or Daughter Leaving Home-29
- __Trouble with In-Laws-29
- __Outstanding Personal Achievement-28
- __Wife Begins or Stops Work-26
- __Begin or End School-26
- __Change in Living Conditions-25
- __Revision of Personal Habits-24
- __Trouble with Boss-24
- __Change in Work Hours of Conditions-20

Life Stress Scale Continued

- __Change in Residence-20
- __Change in Schools-20
- __Change in Recreation-19
- __Change in Church Activities-19
- __Change in social Activities-18
- __Mortgage or Loan Less than \$40,000-17
- __Change in Sleeping Habits-16
- __Vacation-13
- __Christmas-12
- __Minor Violations of the Law-11

Your Total_____

Scale: 0-150=No Significant Problem
151-199=Mild Life Crisis
200-299=Moderate Life Crisis
300 plus=Major Life Crisis

Adapted from : Holmes and Rahe, "The Social Readjustment Rating Scale" Journal of Psychosomatic Research 2 (1967): 213-218.